A Maharatna Company
ISO 9001 Company
ISO 50001 Company

பாரத் ஹெவி இலெக்ட்ரிகல்ஸ் லிமிடெட்
भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited
(A Government of India Enterprise)
Tiruchirappalli – 620 014

MATERIALS MANAGEMENT
Phone: 0431 – 257 7446, 8109; E-mail: mohann@bhel.in, kevin@bhel.in; www.bhel.com

NOTICE INVITING e-TENDER

Dear Sir/ Ma'am,

Ref : BHEL/Trichy **Tender No. 1702000055 dt. 05.02.2020**
Subject : Two-part **e-Tender** inviting techno-commercial and price bids for supply **SOLENOID VALVES FOR DVC PROJECTS**.

Kindly submit your competitive offer for the above subject supply as per the tender terms and conditions given in the tender document through e-procurement portal https://bhel.abcprocure.com only.

	Reference Number: Enquiry 1702000055	**Enquiry Date: 05.02.2020**	**Due date for submission of quotation: 17.02.2020**
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			

BHEL commercial terms & conditions and all annexure can be downloaded from BHEL web site http://www.bhel.com or from the Government tender website http://tenders.gov.in (public sector units) Bharath Heavy Electricals Limited) under enquiry reference "**1702000055**"	
Tenders should reach us before 10:00 hours on the due date. Technical bid will be opened at 10:05 hours on the due date. Tenders would be opened online. Change in opening date, if any, will be intimated later. The date/ time of price bid opening will be intimated to the techno-commercial qualified tenderer separately.	Yours faithfully, For **Bharath Heavy Electricals Limited** (Kevin Ark Kumar) **Dy. Manager/MM/BOI** **HPBP, Tiruchirappalli** **Tamilnadu, India**

ANNEXURE – A

TECHNO - COMMERCIAL TERMS AND CONDITIONS

Description of the Material:	
BHEL Tender No. & Date	

GENERAL INFORMATION

QUOTATIONS: Interested bidders / Suppliers shall submit their offer through e-Procurement mode at https://bhel.abcprocure.com Offers in any other mode will not be accepted. For Enterprise Procurement System (EPS) Bidders/Suppliers are requested to follow these steps. In case of any assistance, please contact for support in this link: https://bhel.abcprocure.com/EPROC/contactus

The bidder has to keep track of any changes by viewing the addendum / Corrigendum's Issued by the Purchaser on time-to- time basis in the E-Procurement platform. The Company calling for tenders shall not be responsible for any claims/problems arising out of this.

Sl. No.	Terms and conditions	Vendor's confirmation
1	**Technical Offer:** Shall be as per technical documents attached in the Enquiry or reference PO/ 's as mentioned. Deviations if any may be indicated in the Technical Deviation Format attached with the enquiry.	YES / NO
2	**Firm Price:** The quoted / finalised rates shall be Firm till execution of the supplies. Vendor has to quote price according to the requirement as detailed in the attached technical documents. Unless there is a change in technical specification from BHEL side, impact price will not be allowed. Vendor to quote rates according to the attached technical documents. In case of any pre-bid query, please contact: Dr. Kevin Ark Kumar, Dy.Manager/Materials Management /BOI Tel: 0431-2578109, email: kevin@bhel.in ; Mr. N Mohan, Asst./Engineer /Materials Management/BOI Tel: 0431-2577446, email: mohann@bhel.in and get your queries cleared before submitting the offer in EPS. Rates/ other price elements once quoted in the Enterprise Procurement System (EPS) cannot be changed after due date shall remain final.	Accepted / Not Accepted
3	**Please refer Enquiry special instruction for item-wise or package basis details**	Noted
4	**Delivery term (Indigenous vendors): F.O.R Destination Basis:** The quoted Rate shall be inclusive of Packing, Forwarding and Freight. Insurance will be on BHEL scope; The destination is mentioned in the Enquiry; you have to quote accordingly. Tender will be finalized on lowest cost to BHEL at destination basis. (Ex-Works, Freight to pay basis is not acceptable to BHEL.) **Inco term (Foreign vendors) :** Offer shall be submitted on **CFR / Chennai Port Basis** for Import by Sea (Successful L1 Bidder should provide break-up of prices such as Unit Price, Freight Charges after price bid opening)	Accepted / Not Accepted
5	**Indigenous Vendor Payment terms (Non-MSE): Tick whichever of the below is applicable** For despatches to Project Site: 100% NEFT after 60 days of Site Acknowledgement For despatches to Trichy Stores: 100% NEFT after 60 days of receipt & acceptance of material. -- **Payment terms for foreign vendors**: 100% payment on CAD basis after 60 days from the date of receipt of documents. Bank Charges outside India are to be borne by vendor only and the bank charges within INDIA shall be borne by BHEL. .	Accepted / Not Accepted
6	**Deviation in Payment Terms: Any deviation in the above Payment Terms, any other conditions in payment terms or any other payment term will not be accepted and offers are liable to be commercially rejected.**	Noted
7	**Liquidated damages:** Delivery of the goods specified in the purchase order should be made within the time prescribed. Failure to dispatch the materials in time as per the delivery quoted in our Purchase Order would make the supplier liable to an un-conditional LD at the rate of 0.5% of the Total order value per week of the delay or part thereof subject to a maximum of 10% of the total order value.	Accepted / Not Accepted
8	**Loading Criteria LD / Penalty:** Any deviation on BHEL LD / Penalty clause, loading (Basic material Value) will be applied to the extent to which it is not agreed by the bidder. LD is for Total Order Value and not for undelivered goods. If LD for undelivered portion is only acceptable then a loading of 10% on Basic Material Value will be applied.	Accepted
9	**Guarantee / Warranty Period** : Guarantee clause 18 months from the date of supply or 12 months from the date of actual put in use, whichever is earlier.	Accepted / Not Accepted
10	**Deviation in Guarantee / Warranty Period:** No Deviation is permitted. If still vendor offered any deviation on the Guarantee / warranty period. Their offer will be rejected.	Accepted / Not Accepted
11	**Delivery Period:** BHEL standard delivery is **Eight weeks from PO** or as mentioned in the enquiry delivery schedule, whichever is earlier. In case of project orders, two weeks extra shall be given for submission of documents by vendor, for Engineering approval. For Spares orders document approval is not applicable. **Vendor quoted delivery period shall include all activities i.e. manufacturing / production, Inspection, Packing, Forwarding and dispatch.**	Accepted / Not Accepted ……………….
12	**Risk purchase:** If the supplier fails to deliver the goods within the delivery specified in the Purchase Order, BHEL will be entitled to terminate the contract / cancel the PO 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 delivery period mentioned in the PO. This clause is mandatory, for the vendor to accept, else the offer will be summarily rejected. If not acceptable, please mention the same in writing, in the next column.	**Accepted**

Signature with Company Seal

13	Validity: 120 days from techno commercial bid opening date	Accepted / Not Accepted
14	GST DETAILS, BHEL TRICHY **GST No. 33AAACB4146P2ZL**	Noted
15	**Please mention your GSTIN Number**	
16	**HSN Codes for Quoted Material:**	
17	**Applicable GST Rate:**	
18	**Implementation of GST** 1. Response to Tenders for Indigenous supplier will be entertained only if the vendor has a valid GST registration no which should clearly mentioned in the offer. If any specific exemption is available, a declaration with due supporting documents need to be furnished for considering the offer. 2. Supplier shall mention their GSTN registration number in all their invoices and invoices shall be in the format as specified/prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice no, commercial invoice no., then the Invoice No which is linked/uploaded in GSTN network shall be clearly indicated), item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN/ SAC Code, etc. 3. All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code). 4. A declaration to the effect that all invoice particulars are/were uploaded in the GSTN network/ portal & all tax liability as per GST rules and regulations have been and will be discharged, shall be mentioned in the invoice. If not mentioned in the invoice, a separate declaration shall be submitted as per the requirement of BHEL. 5. All documents like Mill Test Certificate, LR copy, Guarantee/Warrantee certificate, work completion certificate, any other document mentioned in PO, shall be sent along with the vehicle/consignment. For all consignments received within the calendar month, input credit will be availed within that month in line with monthly returns filing cycle. In case of any discrepancy in the document or non-submission of documents mentioned in the PO, then BHEL will not be able to accept or account the material, in such case availing of tax credit will be deferred to next month or so. 6. In case of discrepancy in the data uploaded by supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note (details to be uploaded in GSTN portal) for the shortages or rejections in the suppliers, within the calendar month notified by BHEL. For any such delay in availing of tax credit for reasons attributable to supplier (as mentioned above), interest (calculated @ SBI Base Rate + 6%) along with penalty if any will be deducted for the delayed period i.e. from the month of receipt till the month tax credit is availed, from the running bills	Noted (N/A for Foreign vendors)
19	Unregistered BHEL (Non-PMD) Temporary vendors for this item code should comply the following **(This clause is not applicable in case of Open Tender; kindly refer the type of tender in EPS)** i. Supplier should submit the filled in supplier registration forms (SRF) available in the BHEL website https://supplier.bhel.in and the other required documents called for in the SRF. Application number of submitted SRF to be quoted in the offer submitted. ii. The hard copy of the submitted SRF shall be submitted to SDC Dept. before enquiry due date without fail. The same shall be scrutinized as per BHEL evaluation procedures iii. The contact details of SDC are as below: Ms. Nalini Subramanian, SDC / MM, 4th Floor, Building 24, BHEL, Trichy – 620014 Ph. No.: 0431-2577301, nalini.s@bhel.in iv. Only those one time vendors who have submitted SRF and indicate application number in offer will be evaluated technically. Further to the above only those one time vendors whose SRF evaluation successfully completed, price bid will be opened. If the above points are not complied, your offer will be rejected. Registered BHEL PMD vendors (for this item / Matl Gp) need not submit the SRF and this point is not applicable.	Accepted / Not Accepted
20	**BENEFITS TO MSE VENDOR:** MSE suppliers can avail the intended benefits only if they submit along with the offer, attested/notarized copies of either 1. Valid NSIC certificate or EM II certificate along with CA certificate applicable for the year, certifying quantum of investment in plant and machinery within the permissible limits as per the act for relevant status (MICRO or SMALL) where the deemed validity of EM II is over. **OR** 2. **Udyog Aadhaar Memorandum No. & CA Certificate** applicable for the year, certifying quantum of investment in plant and machinery within the permissible limits as per the act for relevant status. Date to be reckoned for determining the deemed validity will be the last date of technical bid submission (Part 1 in case of two part bid). **Non submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry, in case of any deficiency in the above required documents or in case the documents are not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal even if submitted earlier.** Documents should be notarized or attested by a Gazetted officer. **For Package basis (Non-Splitable):** **i. If L1 vendor is an MSE vendor entire project package will be ordered on L1 vendor.** **ii. If a Non MSE vendor is coming as L1, then L1 prices will be counteroffered on MSE vendor who is quoting price within the price band L1+15% and if they are agreeing, purchase order will be awarded for full/complete supply of total tendered value to MSE.** **iii. If more than one MSE vendors are available in the L1+15% price band then lowest of the MSE vendor will be selected for counteroffering. If lowest MSE vendor is not accepting it will be counteroffered to the next MSE vendor in the price**	Accepted / Not Accepted (N/A for Foreign vendors)

	band and so on. **iv. Finally if none of the MSE vendor in the price band is not accepting, it will be ordered on L1 non MSE vendor.** **<u>For Item wise evaluation (Splitable):</u>** **If a Non MSE vendor is coming as L1, then L1 prices will be counteroffered on MSE vendor who is quoting price within the price band L1+15% and if they are agreeing, purchase order will be awarded for 25% of the tendered quantity.** ➢ **3% reservation for women owned MSEs, within the above mentioned 25% reservation.** ➢ **6.25% reservation from MSE owned by SC / ST entrepreneurs, within the above mentioned 25% reservation.** **In case of more than one such MSE, the supply shall be shared proportionately.** Payment for MSE indigenous vendors will be as per MSMED Act, 2006.	
21	MSE VENDOR	YES / NO
22	IF MSE VENDOR PROVIDE UDYOG AADHAR MEMORANDUM No. (UAM)	
23	**Definitions of MSEs owned by SC/ST is under:** • **In case of proprietorship firm, proprietor must be SC/ST.** • **In case of partnership firm, the SC/ST partners must be holding at least 51% shares in unit.** **In case of private limited companies, at least 51% share must be held by SC/ST promoters.** Authorised Offices to Issue SC/ST certificate. The caste/Tribe/Community certificate issued by the following authorities in the prescribed form for SCs/STs can be considered. • District Magistrate / Additional District Magistrate / Collector / Deputy Commissioner / Additional Deputy Commissioner / Deputy Collector / 1st class stipendiary magistrate / Sub divisional Magistrate / Taluka Magistrate / Executive magistrate • Chief Presidency magistrate / Additional chief presidency magistrate/Presidency magistrate. • Revenue Officer not below the rank of Tehsildar. • Sub-Divisional officer of the area where the individual and / or his family normally resides. ***To avail the benefits of MSE under SC/ST category, the related documents as stated above should be submitted along with tender documents.***	Accepted / Not Accepted (N/A for Foreign vendors)
24	**Document Submission**: **<u>Along with the offer:</u>** 1. Sub-delivery enquiry deviation format. 2. Filled-in/signed Commercial terms and conditions (this document) to be submitted. 3. Unpriced offer submitted through EPS shall contain minimum of above documents, without which offer will be summarily rejected. 4. If MSE vendor, Please attach UAM No. along with CA Certificate 5. All the technical documents which have been attached along with our enquiry i.e Specification, QP, Packing Procedure, Data Sheet signature to be endorsed on all pages with company seal.	Submitted/ Not Submitted
25	Any deviation on technical/QP/packing requirements shall specifically be indicated in the "sub-delivery enquiry deviation format" attached along with the enquiry. Deviations / clarifications declared elsewhere will not be evaluated. **<u>Also, any deviations from the commercial terms and conditions shall be clearly spelt out in this format itself</u>**. Deviations / clarifications declared elsewhere will not be evaluated. Deviations taken, if any, by vendor as per our requirement above shall be clearly got accepted by BHEL in writing during enquiry stage itself. In the event of an order no deviations, unless accepted clearly by BHEL in writing during enquiry stage will be entertained and all other techno-commercial requirements will be binding on successful bidder and failure to execute the terms will lead to disciplinary action by BHEL against the said bidder.	Accepted / Not Accepted
26	**Enquiry as a package: Please refer the Special Instructions / General note in the EPS enquiry. If on package basis, partial quantity offer will be rejected.**	Accepted / Not Accepted
27	While submitting price bid in the EPS, vendor shall not quote different prices for identical items listed in enquiry (main boilers & spares). In case different prices are quoted for same / identical items/ materials, lowest of the two will be considered for ordering.	Accepted
28	Vendor to submit unpriced bid along with the Part-I Bid in the EPS.	Attached / Not attached
29	Vendors who have registered themselves as MSE, cannot claim the benefits unless they submit the UAM No. along-with the EPS offer for each tender; failing which vendor shall not claim MSE benefits. (N/A for Foreign vendors)	Accepted / Not Accepted
30	Any pre-bid queries / clarification / document requirement etc. shall be asked within 3-4 days of floating tender in EPS. Tender due date extension will not be given without valid reason. Tender due date extension request has to be given before due date / time along-with a valid reason.	Noted
31	It has been observed that vendor gives confirmation to commercial terms & conditions specified in this Annexure and gives different terms & conditions in the unpriced bid / offer documents.	ACCEPTED
32	"Sub-Delivery Enquiry Deviation Format" is important document which has to be filled, (signed & sealed) with all the technical reference document detail and attached along with the offer in the EPS. In case of no deviations. Please mention NIL DEVIATION.	Attached / Not Attached
33	All the technical documents, if attached by BHEL along with the enquiry/ RFQ (Specification / Drawing / QP / Datasheet / Packing Procedure etc.) which are part of this e-tender, should bear your conformation / confirmation and sign with seal on each page. The same shall be scanned & attached as PDF files along with the offer for technical evaluation. (In case of Spares, reference PO is mentioned in the tender general notes, then technical documents need not be submitted, however, Deviation format mentioning the reference PO needs to be submitted)	Technical Docs Submitted / Not Submitted
34	Technical / commercial clarification, if any, will be initiated through EPS / email. Vendor to respond to the clarifications within 3 working days. If the vendor fails to respond, even after three reminders, then the vendor will be considered as non-responsive	Noted

	and is liable to be rejected. Please note that EPS generates auto email whenever clarification / tender event is scheduled. Vendor to keep track and respond immediately.	
35	**Fraud Prevention Policy** Suppliers involving in fraudulent practices or delayed supply (or) non-Supply will be dealt with provision as indicated in "Guidelines for Suspension of Business Dealings with Suppliers / Contractors" which is hosted in website www.bhel.com The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com. 1.0 Integrity commitment, performance of the contract and punitive action thereof: 1.1 Commitment by BHEL: BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in transparent and fair manner, and with equity. 1.2 Commitment by Bidder / Supplier / Contractor: 1.2.1. The bidder / supplier / contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India. 1.2.2. The bidder / supplier / contractor will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to relevant guidelines issues from time to time by Govt. of India / BHEL. 1.2.3. The bidder / supplier / contractor will perform / execute the contract as per the contract terms & Conditions and will not default without any reasonable cause, which causes loss of business / money / reputation, to BHEL. If any bidder / supplier / contractor during pre-tendering / tendering / post tendering / award / execution / post-execution stage indulges in mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India, then action may be taken against such bidder / supplier / contractor as per extant guidelines of the company available on www.bhel.com and / or under applicable legal provisions.	Noted
36	PO Acknowledgement: Within 7 days from the date of receipt of scanned PO copy through email.	Accepted
37	Document Submission after PO: Complete set of valid Documents as per BHEL format viz., Datasheet, GA drawing and QAP / RQP / VQP are to be submitted within 14 days from the date of receipt of PO (e-mail copy). If there is a delay in submission of valid documents within 14 days, the delay will be accounted for the calculation of LD.	Accepted
38	Inspection notice period: Vendor shall raise inspection call to Third Party Inspection Agency / BHEL at least three working days, prior to the proposed date of inspection.	Accepted
39	Vendor shall dispatch the consignment within 3 working days after getting dispatch clearance from BHEL, subsequent delay will be accounted for calculation of LD.	Accepted
40	In the event of PO, the reference date for LD calculation will be date of final inspection Agency's signed Inspection report / Test certificates for Ex-Works & FOB contracts. The reference date for F.O.R contracts will be Invoice date / Lorry way bill date LR date/ Railway Receipt date, whichever is later.	Accepted
43	**For Foreign vendors**: Exchange rate (TT selling rate of SBI) as on scheduled date of tender opening (part -I bid in case of two part bid) shall be considered for evaluation. Tender will be finalized on the basis of "TOTAL COST" basis to BHEL	Noted
44	**For Foreign vendors**: Test certificate as applicable shall be submitted prior to despatch for our review and approval. Shipment shall be made only after obtaining despatch clearance from BHEL. All test certificates /Country of Origin Certificate etc are to be given free of cost.	Noted
45	Inspection & testing requirements: Inspection and testing requirements are to be carried out as per the specification and BHEL/customer approved QAP and all test certificates are to be submitted in complete set as indicated in our specification /QAP. In case of Vendor QP the same shall be submitted for approval along with the offer.	Noted
46	Repair & replacements: Within the guarantee period vendor has to replace / rectify the defective/ damaged items on free of cost within a reasonable time of reporting from our end. All incidental charges like freight, insurance and customs duty / GST are to vendor account only. The defective parts and components shall be collected by your Indian agent or / authorized person, only after completing the replacement / repairs. The defective parts / components will not be returned back to vendor works by us due to procedural problems.	Accepted
47	**BHEL reserves the right to cancel / modify the tender, if the need so arises, without assigning any further notice or reason therefore.**	Accepted
49	For this procurement, Government of India Order: Public Procurement (Preference to **Make in India**), Order 2017 dated 15.06.2017 & 28.05.2018 and subsequent orders issued by the respective Nodal ministry shall be applicable, even if issued after issue of this NIT but before finalization of contract/PO/WO against this NIT. In the event of any Nodal Ministry prescribing higher	Noted
50	Self-certification in Letterhead indicating the percentage of Local content shall be submitted	Submitted / Not Submitted

By signing this Annexure, the vendor consents that the terms & conditions accepted in this Annexure alone, shall be binding between BHEL and the Vendor; and no other terms mentioned, elsewhere in the Offer / Quotation will be considered / accepted by BHEL.

Signature with Company Seal

Pre-Qualification Requirement for

Solenoid Valves

(For Open Tenders Only)

1. Vendor should have supplied similar model/size of Solenoid Valves to power plant installations in India or abroad.

2. Vendor should have executed orders equivalent/more in quantity with the current enquiry. Vendor to confirm and submit the purchase order copies for review.

3. Complete manufacturing process shall be done in-house

BHARAT HEAVY ELECTRICALS LIMITED

HIGH PRESSURE BOILER PLANT, TIRUCHIRAPALLI – 620 014

TECHNICAL DELIVERY CONDITIONS

FOR SUB - DELIVERY COMPONENTS OF

CONTROLS AND INSTRUMENTATION

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BHEL

SOLENOID VALVES

for

Project: DVC Combustion Modification Package

Customer Nos.: 4247 to 4253

REVISION HISTORY

REV. No.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
00	09-12-2019	Initial Release	(N.Rakesh)	(N.Rakesh)	(V.M.Selvaraaj)

1.0 TECHNICAL SPECIFICATION

Sl. No.	Characteristics	Requirements
1.0	**Site Condition**	
1.1	Altitude above mean sea level	110 m above MSL
1.2	Ambient temperature	49.5°C
1.3	Relative humidity	10 – 100 %
2.0	**Solenoid Valve**	
2.1	Operating Principle	Electromagnetic - Single Coil.
2.2	Power supply	24V DC ±10%
2.3	Pick up voltage	85% of rated voltage
2.4	No. of ways & port	2 way 2 port, Direct Acting Solenoid Valve
2.5	Port size (all ports)	½" NPT(F)
2.6	Action	Normally Open or Normally Closed as per purchase enquiry requirement
2.7	Leakage Class	IV or better
3.0	**Solenoid Coil**	
3.1	Duty	Suitable for continuous energization.
3.2	Insulation Class	Class - H
3.3	Enclosure	Stainless steel, IP-65
3.4	Rating	Vendor to indicate in the offer
4.0	**Material**	
4.1	Body	Bronze or better
4.2	Plunger	SS 316 or better
4.3	Seat	Buna – N / Viton
5.0	**Process Medium**	
5.1	Medium	Air
5.2	Operating pressure	5 - 7 bar
5.3	Temperature range	0 - 70 °C
5.4	Flow	2 Nm^3/min (vendor to select suitable orifice)
6.0	**Other Requirements**	
6.1	Manual operator/ Manual override	Not required.
6.2	Manual reset	Not required.
6.3	Electrical connection	½" NPT Cable Gland shall be supplied by the Vendor. Flying leads are not acceptable.
6.4	Tests	Seat leakage test/CV test/Coil insulation test

Sl. No.	Characteristics	Requirements
7.0	**Documents**	
7.1	To be submitted along with offer	a) Sub Delivery Enquiry Deviation Format indicating the Item Description, Technical Specification, Quality Plan, Packing Procedure references. b) Solenoid valve catalogue along with de-codification details.
7.2	To be submitted After Placement of Purchase Order for Approval	a) Data Sheets for Solenoid Valve. b) O&M along with data sheet & test certificates.
7.3	Quality Plan	QA:CI:STD:QP:11/05
7.4	Packing Procedure	QA:CI:STD:PR:04/03

Note:

1. Vendor to duly sign and stamp for compliance/confirmation for the BHEL's specification.
2. In case of any deviation it shall be mentioned only in BHEL's Sub-Delivery Enquiry Deviation Format.
3. The entire system and accessories should not contain any asbestos material.

CONTROLS AND INSTRUMENTATION/QA/FB

STANDARD QUALITY PLAN FOR

SOLENOID VALVES

REV	DATE	PREPARED	REVIEWED	APPROVED	REVISION HISTORY
00	17/01/1990	Sd/-	Sd/-	Sd/-	Initial release.
01	16/06/1997	Sd/-	Sd/-	Sd/-	Format revised
02	21/03/2002	Sd/-	Sd/-	Sd/-	Dept. name changed. CTQ requirements added & General revision.
03	08/01/2004	Sd/-	Sd/-	Sd/-	Revised to include the comments/feedback of Internal discussion.
04	20/01/2009	Sd/-	Sd/-	Sd/-	Format Revised. Hydro test included.
05	15/03/2010	RM.VAIRAVAN	RM.VAIRAVAN	N.SRIDHAR	Routine test revised

Sl. No	Component & Operation	Characteristics	Class	Type of Check	Quantum of check		Ref Doc. & Acceptance STD	Format of record	AGENCY			REMARKS
					M	B/C			M	B	C	
A	**FINISHED PRODUCTS INSPECTION**											
01	Routine tests	a. Physical verification for model, type and dimension	Major	MEAS	100%	20%	Spec. Drg, IS 8935	TR	P	W		
		b. Coil duty	Major	ELEC	Sample	Sample	Mfr Std.	TR	P	W		
		c. Port size (all ports)	Major	PHYS	100%	20%	Spec. Drg, IS 8935	TR	P	W		
		d. Mounting accessories	Major	PHYS	100%	20%	-Do-	TR	P	W		
		e. Power supply voltage variation test	Major	ELEC	100%	20%	-Do-	TR	P	W		
		f. Pick up voltage test	Major	ELEC	100%	20%	-Do-	TR	P	W		
		g. HV/IR test	Major	ELEC	100%	20%	-Do-	TR	P	W		
		i. Hydro test at 15 bar	Major	MECH	100%	20%	-Do-	TR	P	W		
		j. Seat leak test	Major	MECH	100%	20%	-Do-	TR	P	W		
		k. Functional test	Major	ELEC	100%	20%	-Do-	TR	P	W		
		l. Type, Insulation of Copper wire	Major	PHYS	100%	Sample	-Do-	TC	P	V		
02	Type test	a. Enclosure protection test	Major	ENVI	One of Design	One of Design	Spec., IS 60947 Pt.1	TC	P	V		
		b. Temperature rise test for coil	Critical	THER	-Do-	-Do-	Spec. IS 8935	TC	P	V		

B.NOTES:

1.LEGENDS:

THER	: Thermal	MEAS	: Measurement
MECH	: Mechanical	ENVI	: Environmental
ELEC	: Electrical	TC	: Test certificate
TC	: Test Certificate	TR	: Test Report

2. The vendor at their works shall arrange all testing facilities. Tests for which facilities are not available are to be carried out at recognized National Test Houses like ETDC/CIL/NPL/ERTL etc., at vendor cost.
3. Through Log Book / any other documents available at the vendor's works, it shall be possible to correlate the finished products with raw material and in process stage checks / inspection carried out.
4. All Measuring & Testing Instruments shall be periodically calibrated from recognized test houses certificates made available during inspection for verification.
5. Type test certificate shall not be earlier than 5 years from the date of Purchase enquiry.
6. Vendor to give tentative inspection program in advance and confirm exact date two weeks in advance for arranging BHEL's inspection.
7. Packing shall be as per the "PACKING PROCEDURE "indicated in the specification.

C. REFERENCE STANDARDS:

(For Indicated Standards Refer the Latest Version)

IS 8935	: Actuators – Electric solenoid operated
IS 60947 pt.1	: General rules for low voltage switchgear. (Degree of Enclosure protection offered by enclosures)
IS 4905	: Methods of random sampling

M- MANUFACTURER/ SUB-VENDOR; **B** - BHEL / TPI ; **C** - CUSTOMER / TPI
P - PERFORM ; **W** - WITNESS **V** - VERIFICATION ;

BHARAT HEAVY ELECTRICALS LIMITED
TIRUCHIRAPPALLI

CONTROLS AND INSTRUMENTATION / FB
QUALITY ASSURANCE

STANDARD PACKING PROCEDURE
FOR
ALL INSTRUMENTS AND MISCELLEANEOUS ITEMS
(ELECTRICAL, ELECTRONIC AND PNEUMATIC)

Rev	Date	Prepared	Checked	Approved	Revision History
00	01.01.96	Sd/-	Sd/-	Sd/-	Initial History
01	28.03.02	Sd/-	Sd/-	Sd/-	Department name changed
02	26.02.07	Sd/-	Sd/-	Sd/-	Revised after discussion with Shipping Dept.
03	17.12.16	A.SRIHARI RAO A. SriHari Rao	RM.VAIRAVAN	S.DAKSHINAMOORTHY	Revised to suit all type of instruments.

1. **Scope**

This procedure gives minimum guidelines to be complied with for packing of Electrical, Electronic and pneumatic Instruments. This packing shall be suitable for different handling operations and for the adverse conditions during transportation and during indoor / outdoor storage for period more than one year.

2. **Material for packing**

The individual instrument shall be packed in carton box (specifically made for particular instrument) and grouped together inside a box made of wood or plywood as per National / International standard.

3. **Packing**

- Items shall be inspected for cleanliness immediately before packaging. Dirt, oil, residue, metal chips or other forms of contamination shall be removed.
- Adequate protection shall be provided against mechanical damage and atmospheric corrosion in transit and, for equipment suitable for outside storage, for prolonged storage at the site prior to installation.
- Water proof barrier material – high density polythene shall be used as a resistant to grease and water; it shall protect items from airborne and windblown soils.
- Desiccants like silica gel to be used inside the carton box. Silica gel shall conform to IS 3401.The gel is to be packed in sachets placed at different positions inside the components for absorbing moisture. The quantity of silica gel shall be adequate for storage period of one year.
- All tapped openings in equipment shall be plugged with plastic plugs to protect internal / external threads.
- Use a sturdy cardboard shipping carton, large enough for at least 3 inch foam padding around the instrument.
- Do not use loose plastic foam pieces, which can shift during transport.
- Secure the box flaps with packaging tape or box staples.

3.1) Marking & Labelling:

- Components and their containers shall be identified by marking. Shipping marks shall be on all sides of package. The shipping marks shall be at least 3 inches high where space permits. Markings are to be in black paint or ink depending on shade of the package surface.
- Cautionary symbols to be stenciled in red waterproof paint or ink.

- The gap between job and the box shall be filled with suitable material like jute, coir, thermo coal, etc.
- For export packing additional care shall be taken as per contract requirements if applicable. Otherwise, suitable box made of seasoned wood and / or plywood sheets of required thickness shall be used with suitable sea worthy packing protection.

4. Marking

- After completing the packing, Stencil marking, as per dispatch instructions and symbol marking as per Annexure – I shall be made. Please ensure the box is stenciled with "FRAGILE ITEM", "HANDLE WITH CARE".

5. Packing Slip

- A copy of the packing slip, kept in a polythene cover shall be kept inside the box. Another copy of the packing slip, kept in a polythene cover shall be kept outside the box and firmly fixed to the case.

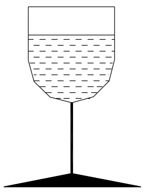
6. Caution

- Do not pack any other Mechanical items with this case.

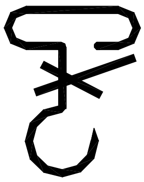
7. General

- These packing procedures are the minimum requirements in addition to the standard instructions mentioned in the Purchase Order and Specification.
- Deviation to meet the packing procedure requirements / non-clarity in packing approach in any quotation will be liable for rejection of offer.

ANNEXURE – 1

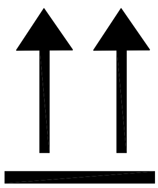


FRAGILE, HANDLE WITH CARE



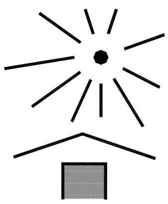
USE NO HOOKS

NOTE: The design of heavy goods packages cannot always resist top lifting by grabhooks.

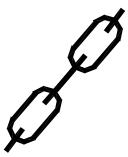


THIS WAY UP

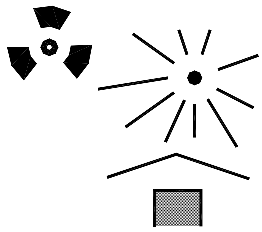
NOTE: Certain designs of small cases make it difficult to distinguish top from bottom.



KEEP AWAY FROM HEAT



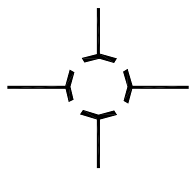
INTERNATIONAL "SLING HERE" SYMBOL



PROTECT FROM HEAT AND RADIOACTIVE SOURCES

KEEP DRY

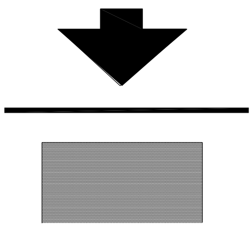
NOTE: Not all cases have waterproof internal linears: plywood used in the construction may not have a waterproof glueline.



CENTRE OF GRAVITY

NOTE: This should be stancilled as a minimum on the two longest case sides (this information will normally be supplied by the manufacturer of the item(s) packed).

... kg max



STACKING LIMITATION

NOTE: The maximum load in kilograms should be marked above the arrow.

/ On Bidder's office letter pad /

<u>Self-Declaration</u>

Enquiry No.	
Enquiry Date	

In line with Government public procurement order Number P-45021/2/2017-B.E-II dated 15.06.2017, and further modified order dt. 28.05.2018,

I / We hereby declare that I / We are a "Local Supplier" meeting the requirement of minimum local content (…….%) defined in the above government notification for the goods against above mentioned enquiry Number.

Details of location at which local value addition will be made is as follows:

Door No.	
Street / Address 1	
Street / Address 2	
District	
State	
Country	
PIN Code	

We also understand that the false declarations will be considered as breach of Integrity and liable for action.

For Company Name:
Seal:
Signature:

Date:
Place:

(Please fill all the yellow color field)

ANNEXURE – II

(TO BE SUBMITTED ON CHARTERED ACCOUNTANT LETTER HEAD)

This is to Certify that M/s ……………………………………………………………………………………… ……………………………………… (herein after referred to as 'company') having its registered office at ……………………………………………………………………… is registered under MSMED Act 2006, Entrepreneur Memorandum No. (Part – II) OR (UAN)……………………………………… Dtd: ………………………………, Category: …………………………………… (Micro / Small). (Copy enclosed).

Further Verified from the Books of Accounts that the investment of the company as per the latest audited financial year ………………………… as per MSMED Act 2006 is as follows:

1. For Manufacturing Enterprises: Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No. S.O.1722 (E) dated October 5, 2006:
   ₹ …………………………….. Lakhs

2. For Service Enterprises: Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under MSMED Act, 2006:
   ₹ ……………………………… Lakhs

(Strike off whichever is not applicable)

The above investment of ………………………… Lakhs is within permissible limit of …………………… Lakhs for…………………………………… Micro / Small (Strike off whichever is not applicable) Category under MSMED Act 2006.

Or

The company has been graduated from its original category (Micro/Small) (Strike off whichever is not applicable) and the date of graduation of such enterprise from its original category is ……………… (dd/mm/yyyy) which is within the period of 3 years from the date of graduation of such enterprise from its original category as notified vide S.O. No. 3322 (E) dated 01.11.2013 published in the gazette notification dated 04.11.2013 by Ministry of MSME.

Date:

(Signature)
Name –
Membership Number –
Seal of Chartered Accountant

429-024

PURCHASE / MM / FB
SUB DELIVERY - ENQUIRY - DEVIATION

Page | OF

SCHEDULE OF DEVIATION TO SUB - DELIVERY ENQUIRY No.		DATE	

DESCRIPTION			
SPECIFICATION		DRG. No.	
QUALITY PLAN			

DOCUMENT REFERENCE	BHEL ENQ. CALLED FOR	FIRM'S ALTERNATE OFFER

CERTIFIED THAT OTHER THAN THE ABOVE DEVIATIONS, WE ARE ACCEPTING ALL THE OTHER SPECIFICATIONS AND REQUIREMENTS IN FULL TO YOUR ENQUIRY

STATION :

DATE : SIGNATURE OF FIRM'S REPRESENTETIVE FIRM SEAL

NOTE: 1. Deviations should be taken only in the extreme case.
2. If necessary, use additional sheets with page control number.