

**ITEM: SUPPLY OF FLANGES AS PER ANNEXURE No. A/12303248/25.01.2023**

**TECHNICAL PQR, DRAWING, QAP: AS ATTACHED**

**QUANTITY: As per AS ATTACHED BOQ**

**BILL OF MATERIAL (BOM):**

Sr. No.	BHEL Item Code	Description of Item/Specification	Quantity	UOM	Technical Specification/Drawings
1	184522	FLANGE CHI Fitment Ø508 [3 987 14 50121/03]	114	EA	AS ATTACHED

- Bidder to provide signed & Sealed GEM BID, drawings, QAP & Annexure No. A/12303248/25.01.2023 with their offer.
- To get MSE preference, bidder to choose MSE purchase preference on GEM portal otherwise purchase preference shall not be applicable.
- To get MII preference, bidder to choose MII purchase preference on gem portal and bidder to submit signed local content declaration otherwise purchase preference shall not be applicable.
- Item shall be manufactured as per attached drawing.
- Delivery Schedule: Material shall be supplied to BHEL SBD MP Stores, Bangalore within 45 days from the date of PO.
- Delivery location: BHEL SBD MP Stores Bangalore-560012 as per GeM consignee.
- Price basis: **Price shall be firm till completion of the contract. No PVC is applicable.**
- Payment terms: Hundred Percent (100%) of basic price of the material supplied as per PO, along with 100% taxes & duties (as applicable) shall be payable on pro-rata as per following manner
  - 45 days for Micro & Small Enterprises (MSEs)
  - 60 days for Medium Enterprises
  - 90 days for Non-MSME
 from the date of receipt of goods at BHEL SBD and receipt of complete documents at BHEL SBD as specified in Clause No. 9 below subject to acceptance of materials. [i.e. date of acceptance of material or date of submission of complete set of documents (whichever is later) shall be considered for reckoning the due date of payment.]
- Documents to be Submitted by Vendor for payment:
  - Original GST compliant invoice. (Original for Buyer copy)
  - Copy of LR/ Delivery Challan for local supplier in place of LR
- Invoice to be made as per the prevailing GST format only. TDS Deductions applicable as per GST Law & TDS certificate shall be issued by BHEL in line with the latest amendment in GST Law.
- Technical PQR- requirement i.e. Years of Past Experience as per technical PQR and Past Experience shall be supply of 10% of bid quantity.
- Minimum Average Annual Turnover of the Bidders shall be 2 lakhs for last three FY.
- Inspection and Quality Clearance: As per attached QAP

BOQ FOR 12303248							
Item Number	Item Code	Item Description	Quantity	UOM	Unit Price (Inclusive of TAX) [QUOTED/NOT QUOTED]	Applicable GST %	HSN Code
1	184522	FLANGE CHI Fitment Ø508 3 987 14 50121/03	114.00	EA			



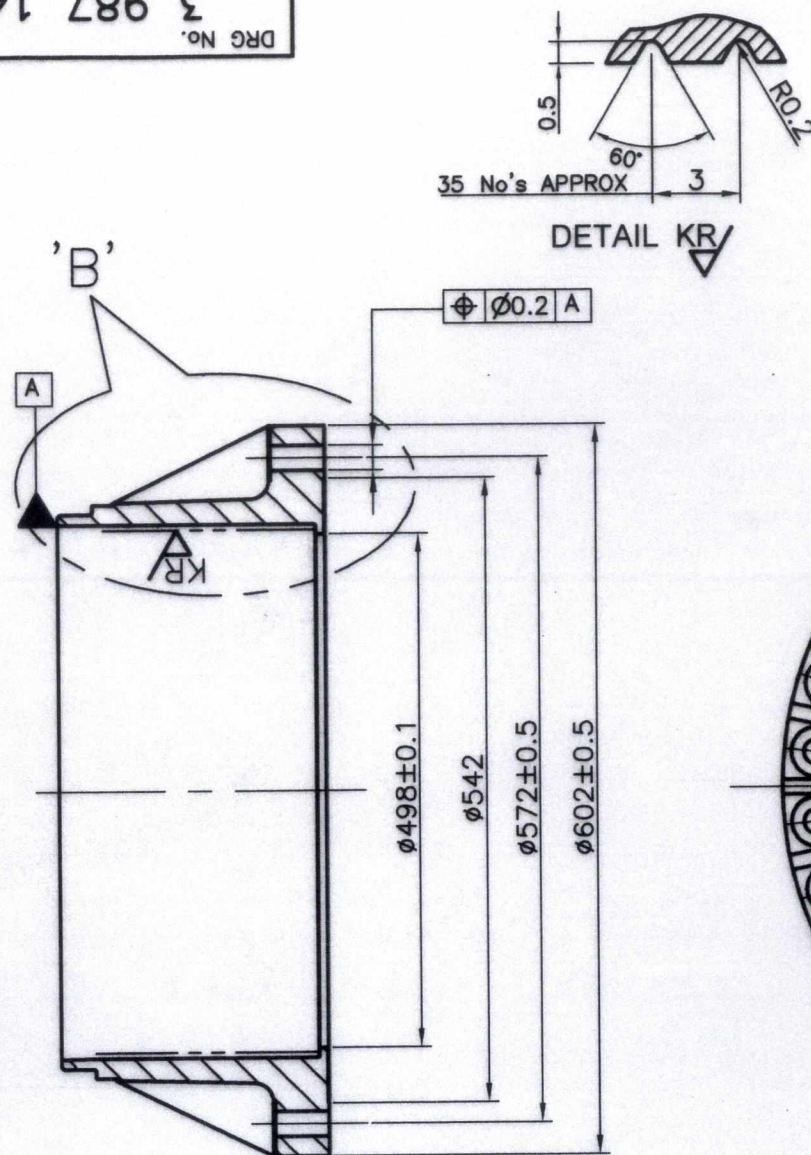
ALL DIMENSIONS ARE IN mm.

DRG No. 3 987 14 50121

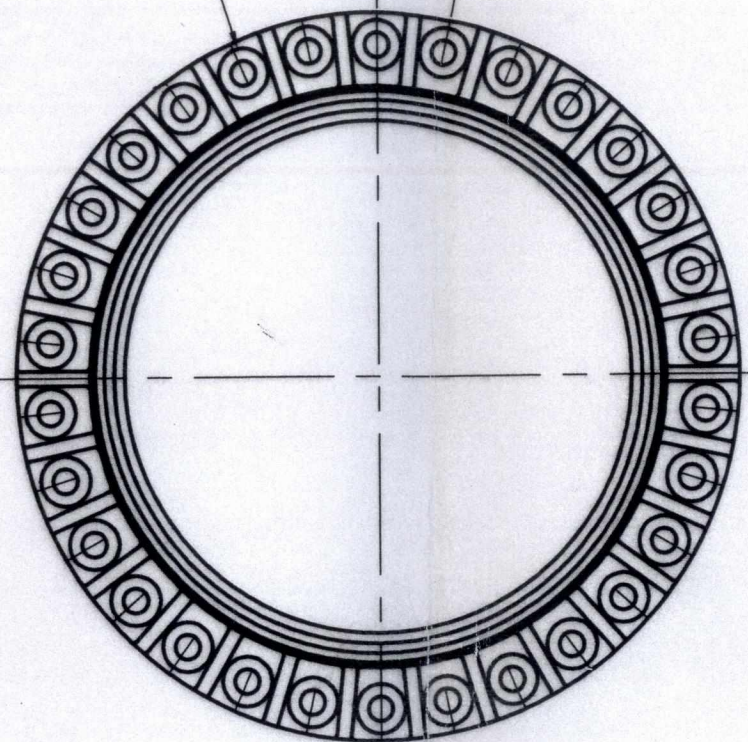
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED., IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY

SIGN AND DATE	REF. DRG. No.
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	

INVENTORY No.



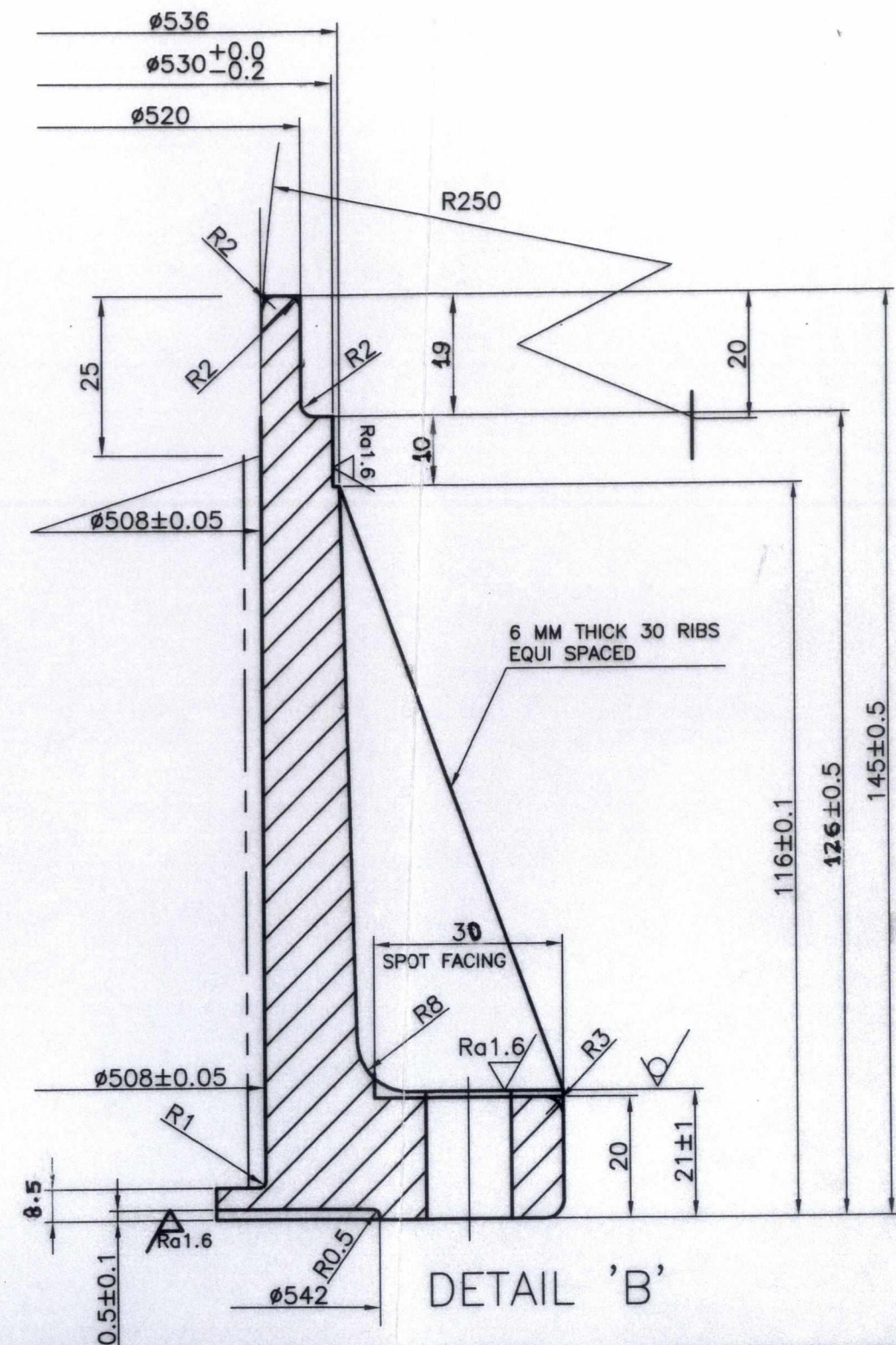
Ø13.5X30 No'S HOLES EQUI SPACED ON PCD  
572±0.5


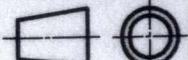


CONTROLLED COPY

NOTES:

1. ALL SHARP CORNERS TO BE ROUNDED OFF BY R2.
2. ALL DIMENSIONS ARE AFTER MACHINING AND DRILLING.
3. SPOT FACING SHOULD BE CONCENTRIC TO RESPECTIVE DRILLED HOLES AND TO BE DONE AT ONE SETTING.
4. COLOURLESS ANODISING MINIMUM 5 MICRONS THICK TO BE CARRIED OUT AFTER ALL MACHINING OPERATIONS.
5. CASTING SHOULD BE FREE FROM POROUS, BLOWHOLES & SHRINKAGES ETC.
6. CASTING SHOULD BE MANUFACTURED IN "PRESSURE DIE CASTING" METHOD. ONLY



				<b>BHARAT HEAVY ELECTRICALS LTD;</b>		NAME		SIGN		DATE			
ELECTROPORCELAINS DIVISION BANGALORE 560 012						DRN	MAHESHA	<i>Mahesha</i>		13.12.2011			
						CHD	A.V.M	<i>A. V. M.</i>		24.12.2011			
						APPD	S.S.P	<i>SSP</i>		24.12.11			
DEPT		GRADE OF TOL DIM			SCALE		WEIGHT (kg)		REF TO ASSY.DRG		ITEM No.	No.OF ITEMS	
CODE		C/M/F			N T S		12.0 (Approx)						
TITLE <b>FLANGE FOR COMPOSITE HOLLOW INSULATOR (MACHINED)</b>						CARD CODE		DRAWING No.				REV.	
								3 987 14 50121				03	
								No.OF SHEETS					

SUPERSEDES DRG. No. 3 987 14 50121/02

SHT.24 SIZE A3 420 x 297





## TECHNICAL PRE-QUALIFICATION REQUIREMENT (TECHNICAL PQR)

### TENDER DESCRIPTION: FLANGE FOR COMPOSITE HOLLOW INSULATOR

NB:- Technical PQR not applicable for PMD enlisted vendor of BHEL,SBD

Sr. No.	Details of Requirement	Supporting Documents to be submitted by the Bidder	Bidder Confirmation
1.	Vendor should be a Manufacturer of anodized Aluminium flanges.	Business license copy and ISO 9001 certificate copy	
2.	Should have supplied at least 10 nos of similar items	Copy of PO for similar items	

Prepared By	Approved by
<b>JAGANNATH MAJI</b> Digitally signed by JAGANNATH MAJI DN: cn=JAGANNATH MAJI, o=BHEL, ou=SBD, email=jagannath@bhel.in, c=IN Date: 2022.11.19 13:43:21 +05'30' Adobe Acrobat Reader version: 2022.003.20282	<b>PRATAP MUKHERJEE</b> Digitally signed by PRATAP MUKHERJEE DN: c=IN, o=BHARAT HEAVY ELECTRICALS LIMITED, ou=BHEL SBD BANGALORE, postalCode=560012, st=KARNATAKA, 2.5.4.20=f181c7a6157fb821eebaca0d8f10951d8e3323a0a352aa37a716eb9fc8e9dd4f, pseudonym=AB2B783910B9983240FE1DD115F10C8D2976A955, serialNumber=85268162EFB465D4B9BF34F27049FEA0688952E8E6F2A91E4717DC65206E7DCF, cn=PRATAP MUKHERJEE Date: 2022.11.19 16:29:41 +05'30'



**BHARAT HEAVY ELECTRICALS LIMITED**  
SOLAR BUSINESS DIVISION  
PROF.C.N.R RAO CIRCLE, IISc POST  
MALLESHWARAM, BENGALURU-560012

**STANDARD QUALITY ASSURANCE PLAN**  
ITEM: ALUMINIUM FLANGE

QP NO.: EPD/QP/IP/2020-21/0007  
REV. NO.: 00  
DATE: 03.02.2021  
PAGE 1 OF 2

SL. NO	ITEM/ COMPONENT	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY		REMARKS
										M	B	
1.	2.	3.	4.	5.	6.	7.	8.	9.	D*	**	10.	11.
A	INSPECTION BY SUPPLIER AT THEIR WORKS											
A.1	Aluminium Flange	Visual	Major	Physical	100%	BHEL Spec./ BHEL Drg.	BHEL Spec./ BHEL Drg.	Inspection Report	√	P	V	
A.2		Gauge Inspection (as applicable)	Major	Physical	100%			Inspection Report	√	P	V	
A.3		Dimensions & Markings, Color	Major	Physical	5 per 1000 & part thereof			Inspection Report	√	P	V	
A.4		Tensile Strength	Major	Mechanical	1/melt	As per Grade in drawing	As per Grade in drawing	Inspection Report	√	P	V	
A.5		% Elongation	Major	Mechanical	1/melt			Inspection Report	√	P	V	
A.6		Hardness	Major	Mechanical	1/melt			Inspection Report	√	P	V	
A.7		Chemical Composition	Major	Chemical	1/melt			Inspection Report	√	P	V	
A.8		Coating/Anodizing (if applicable) a. Thickness b. Color	Major	Physical	5 per 1000 & part thereof	BHEL Spec./ BHEL Drg.	BHEL Spec./ BHEL Drg.	Inspection Report	√	P	V	
B		INSPECTION AT BHEL WORKS										
B.1	Aluminium Flange	Visual	Major	Physical	IS:2500 Pti AQL 0.25%	BHEL Spec./ BHEL Drg.	BHEL Spec./ BHEL Drg.	Inspection Report	-	-	P	
B.2		Gauge Inspection (as applicable)	Major	Physical	IS:2500 Pti AQL 0.65%			Inspection Report	-	-	P	
B.3		Dimensions & Markings, Color	Major	Physical	2 per 1000 & part thereof			Inspection Report	-	-	P	
B.4		Tensile Test, % Elongation, Hardness on Test Bar	Major	Mechanical	1/melt	As per Grade in drawing	As per Grade in drawing	Inspection Report	-	-	P	Vendor to provide 3 test bar per melt per lot
B.5		Chemical Composition	Major	Chemical	1/melt	As per Grade in drawing	As per Grade in drawing	Inspection Report	-	-	P	

**LEGEND:** \*D: RECORDS, IDENTIFIED WITH "TICK" (√) SHALL BE ESSENTIALLY INCLUDED BY VENDOR IN QA DOCUMENTATION.


\*\* M: MANUFACTURER/SUB-VENDOR, B: BHEL/BHEL NOMINATED INSPECTION AGENCY  
P: PERFORM W: WITNESS AND V: VERIFICATION.

FOR BHEL USE

PREPARED BY: B D RANGAPPA



APPROVED BY: ADITYA KUMAR MOURYA

QUALITY ASSURANCE

 <b>BHEL-SBD</b>		<b>BHARAT HEAVY ELECTRICALS LIMITED</b> <b>SOLAR BUSINESS DIVISION</b> <b>PROF.C.N.R RAO CIRCLE, IISc POST</b> <b>MALLESHWARAM, BENGALURU-560012</b>			<b>STANDARD QUALITY ASSURANCE PLAN</b> <b>ITEM: ALUMINIUM FLANGE</b>			<b>QP NO.: EPD/QP/IP/2020-21/0007</b> <b>REV. NO.: 00</b> <b>DATE: 03.02.2021</b> <b>PAGE 2 OF 2</b>				
SL. NO	ITEM/ COMPONENT	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY		REMARKS
										M	B	
1.	2.	3.	4.	5.	6.	7.	8.	9.	D*	** 10.		11.

**Notes:**

1. If vendor is supplying an item first time, sample approval to be obtained from Quality / Engg. before taking up bulk manufacturing.
2. The SQAP shall be read in conjunction with BHEL Purchase Specification mentioned in Purchase Order and shall deem to include any additional tests as per the specification/Standard.
3. Material supplied shall be in line with BHEL Purchase Order, BHEL Purchase Specification, BHEL Drawing, applicable Standards, or any other document applicable.
4. In case of any contradiction between this SQAP & BHEL Specifications the following precedence shall be followed:
  - 1<sup>st</sup>: BHEL Purchase Order, BHEL Purchase Specification & BHEL Drawing;
  - 2<sup>nd</sup>: This STANDARD QUALITY ASSURANCE PLAN & Applicable standard;
  - 3<sup>rd</sup>: Manufacturers plant standards
5. Packing shall be as per BHEL purchase order.
6. BHEL reserves the right for pre-dispatch inspection at vendor works by BHEL or BHEL nominated agency.
7. In case of pre-dispatch inspection, Supplier shall raise the inspection call in the CQIR URL [www.cqir.bhel.in](http://www.cqir.bhel.in) with inspection agency as BHEL SBD and shall upload Test Certificates, Internal Tests Report as per this SQAP in CQIR Portal. TC will be verified during inspection and will be signed by the inspector.
8. Duly Sealed & signed original Test Certificates, Internal Tests Report along with test bar shall be sent along with lot.

<b>LEGEND: *D:</b> RECORDS, IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY VENDOR IN QA DOCUMENTATION. <b>** M:</b> MANUFACTURER/SUB-VENDOR, <b>B:</b> BHEL/BHEL NOMINATED INSPECTION AGENCY <b>P:</b> PERFORM <b>W:</b> WITNESS AND <b>V:</b> VERIFICATION.	<b>FOR BHEL USE</b>		
	 PREPARED BY: B D RANGAPPA		 APPROVED BY: ADITYA KUMAR MOURYA
			QUALITY ASSURANCE