

**Enquiry items along with quantities:**

Item No.	Size & Item description	Technical requirement	Quantity in kg (Maximum)
1	60mm dia X 4000mm – 6000mm LG	Forged bar as per specification no. STV M22117 in rough machined condition with tolerance on diameter (+4mm) (-0.00 mm). Inspection shall be done as per IT GTVR11204.	5500
2	120mm dia X 4000mm – 6000mm LG		5500
3	170mm dia X 4000mm – 6000mm LG	Forged bar as per specification no. STV M22117 in rough machined condition with tolerance on diameter (+4mm) (-0.00 mm). Inspection shall be done as per IT GTVR11218.	5500
TOTAL			16500 kg

**Note:**

1. Chemical and mechanical testing shall be carried out at NABL-accredited laboratories.
2. All documents, including NDT procedures, heat treatment procedures, etc., shall be submitted to BHEL for customer approval prior to the commencement of manufacturing.
3. The manufacturing process plan (MPP) shall be provided to BHEL for approval before the start of manufacturing.
4. The vendor shall submit all required documents within 15 days from the date of the GeM contract.
5. The delivery schedule shall commence from the date of approval of documents by BHEL.

Quantity variation as per below:

**For item 1** - Supplies quantity are to be restricted between 5500 kg & 4500 kg.

**For item 2** - Supplies quantity are to be restricted between 5500 kg & 4500 kg.

**For item 3** - Supplies quantity are to be restricted between 5500 kg & 4500 kg.

**Pre-qualification criteria:**

Sl. No.	Description of pre-qualification requirement	Vendor's Response	
		Complied (YES/NO)	Supporting Documents required to accept compliance
1	Manufacturer of steel Round Bar		Relevant certificate of being manufacturer / declaration of OEM  Firm name, contact details, address & email from whom bars intended to supply to be furnished.
2	Vendors should have experience of manufacturing, Material Testing & supplying Alloy Steel forging/Round Bar (685 N/mm <sup>2</sup> min Rp0.2, 40CrAlMo6-10 steel) as per Spec. STV M22117 Rev C, or equivalent grade meeting our Requirement during last 7 years (ending last day of month previous to the one in which NIT is published)		Purchase order and Mill Test certificate.
3	Company shall be certified with ISO 9001 or equivalent.		Valid certificate to be submitted.

**Note:**

1. BHEL has right to verify information / confirmation furnished, by asking additional documents, proofs etc.

**ALL THE ABOVE POINT WISE PRE-QUALIFICATION REQUIREMENT ARE TO BE NECESSARILY ACCEPTED BY THE BIDDERS FOR THEIR OFFERS TO BE CONSIDERED FAILING WHICH THEIR OFFERS SHALL BE REJECTED.**

**DECLARATION (To be given by Bidder)**

**GeM Bid No.....**

**Item Description: .....**

With reference to above reference bid, we M/s..... (Bidder's Name)  
confirm/ declare the following.

1. Quoted Make/OEM name - .....
2. We are OEM or Reseller - .....
3. We confirm Nil deviation from GeM bid document (NIT).

**Note:**

1. OEM details such as name, designation, address, e-mail Id and Phone number required to be furnished along with the technical bid. (also refer ATC clause).
2. Commercial Deviation/deviation in delivery shown separately or found hidden in the offer, will not be taken cognizance of.

Signature of the Authorized Signatory of the Bidder

Name:

Designation:

Contact No.:

Email:

Stamp / Seal of Firm

## Annexure-2

### Declaration Regarding MSE Category (to be given by Bidder)

In pursuant to the Public Procurement Policy for MSEs Order, 2012, I/We declare(s) that My/Our firm is(are) falling under the following MSE category and I/we shall submit documentary evidence/ Govt. Certificate etc. (UDYAM certificate) in support of the same along with the techno-commercial offer.

Type under MSE	SC Owned	ST Owned	Women Owned	Others (excluding SC/ST & Women Owned)
Micro				
Small				

(√ Tick whichever is applicable)

Note: If the bidder does not furnish the above in the tender, offer shall be processed construing that the bidder is not falling under MSE category.

Signature of the Authorized Signatory of the Bidder

Name:

Designation:

Stamp / Seal of Firm

## **Annexure-3**

### **Declaration Regarding Conflict of Interest**

(to be given by Bidder)

Conflict of interest would said to have occurred in the tender process and execution of the resultant contract, in case of any of the following situations:

- 1) If its personnel have a close personal, financial, or business relationship with any personnel of BHEL who are directly or indirectly related to the procurement or execution process of the contract, which can affect the decision of BHEL directly or indirectly.
- 2) The bidder (or his allied firm) provided services for the need assessment/ procurement planning of the Tender process in which it is participating.
- 3) Procurement of goods directly from the manufacturers/ suppliers shall be preferred. However, if the OEM/ Principal insists on engaging the services of an agent, such agent shall not be allowed to represent more than one manufacturer/ supplier in the same tender. Moreover, either the agent could bid on behalf of the manufacturer/ supplier or the manufacturer/ supplier could bid directly but not both. In case bids are received from both the manufacturer/ supplier and the agent, bid received from the agent shall be ignored. However, this shall not debar more than one Authorised distributor (with/ or without the OEM). from quoting equipment manufactured by an Original Equipment Manufacturer (OEM) in procurements under a Proprietary Article Certificate.
- 4) A bidder participates in more than one bid in this tender process. Participation in any capacity by a Bidder (including the participation of a Bidder as a partner/ JV member or sub-contractor in another bid or vice-versa) in more than one bid shall result in the disqualification of all bids in which he is a party. However, this does not limit the participation of an entity as a sub-contractor in more than one bid if he is not bidding independently in his own name or as a member of a JV.

I/We declares that I/We have read and understood the above aspects, and confirms that such conflict of interest does not exist and undertakes that I/We will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s), in this regard. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. In case, I am /We are, found having indulged in above activities, the same will be considered as a violation of the tender conditions, and suitable action shall be taken by BHEL as per extant policies/ guidelines.

Signature of the Authorized Signatory of the Bidder

Name:

Designation:

Stamp / Seal of Firm

**Declaration Regarding Breach of Contract, Remedies, and Termination (To be given by Bidder).**

The following shall amount to breach of contract:

- I. Non-supply of material/ non-completion of work by the Supplier/Vendor within scheduled delivery/ completion period as per contract or as extended from time to time.
- II. The Supplier/Vendor fails to perform as per the activity schedule and there are sufficient reasons even before expiry of the delivery/ completion period to justify that supplies shall be inordinately delayed beyond contractual delivery/ completion period.
- III. The Supplier/Vendor delivers equipment/ material not of the contracted quality.
- IV. The Supplier/Vendor fails to replace the defective equipment/ material/ component as per guarantee clause.
- V. Withdrawal from or abandonment of the work by the Supplier/Vendor before completion as per contract.
- VI. Assignment, transfer, subletting of Contract by the Supplier/Vendor without BHEL's written permission resulting in termination of Contract or part thereof by BHEL.
- VII. Non-compliance to any contractual condition or any other default attributable to Supplier/Vendor.
- VIII. Any other reason(s) attributable to Vendor towards failure of performance of contract. In case of breach of contract, BHEL shall have the right to terminate the Purchase Order/ Contract either in whole or in part thereof without any compensation to the Supplier/Vendor.
- IX. Any of the declarations furnished by the contractor at the time of bidding and/ or entering into the contract for supply are found untruthful and such declarations were of a nature that could have resulted in non-award of contract to the contractor or could expose BHEL and/ or Owner to adverse consequences, financial or otherwise.
- X. Supplier/Vendor is convicted of any offence involving corrupt business practices, antinational activities or any such offence that compromises the business ethics of BHEL, in violation of the Integrity Pact entered into with BHEL has the potential to harm the overall business of BHEL/ Owner.

Note-Once BHEL considers that a breach of contract has occurred on the part of Supplier/Vendor, BHEL shall notify the Supplier/Vendor by way of notice in this regard. Contractor shall be given an opportunity to rectify the reasons causing the breach of contract within a period of 14 days.

In case the contractor fails to remedy the breach, as mentioned in the notice, to the satisfaction of BHEL, BHEL shall have the right to take recourse to any of the remedial actions available to it under the relevant provisions of contract.

**Remedies in case of Breach of Contract.**

- i) Wherein the period as stipulated in the notice issued under clause 14.1 has expired and Supplier/Vendor has failed to remedy the breach, BHEL will have the right to terminate the contract on the ground of "Breach of Contract" without any further notice to contractor.
- ii) Upon termination of contract, BHEL shall be entitled to recover an amount equivalent to 10% of the Contract Value for the damages on account of breach of contract committed by the Supplier/Vendor. This amount shall be recovered by way of encashing the security instruments like performance bank guarantee etc available with BHEL against the said contract. In case the value of the security instruments available is less than 10% of the contract value, the balance amount shall be recovered from other financial remedies (i.e. available bills of the Supplier/Vendor, retention amount, from the money due to the Supplier/Vendor etc. with BHEL) or the other legal remedies shall be pursued.

Signature of the Authorized Signatory of the Bidder

- iii) Wherever the value of security instruments like performance bank guarantee available with BHEL against the said contract is 10% of the contract value or more, such security instruments to the extent of 10% contract value will be encashed. In case no security instruments are available or the value of the security instruments available is less than 10% of the contract value, the 10% of the contract value or the balance amount, as the case may be, will be recovered in all or any of the following manners:
- iv) In case the amount recovered under sub clause (a) above is not sufficient to fulfil the amount recoverable then; a demand notice to deposit the balance amount within 30 days shall be issued to Supplier/Vendor.
- v) If Supplier/Vendor fails to deposit the balance amount within the period as prescribed in demand notice, following action shall be taken for recovery of the balance amount:
  - a. from dues available in the form of Bills payable to defaulted Supplier/Vendor against the same contract.
  - b. If it is not possible to recover the dues available from the same contract or dues are insufficient to meet the recoverable amount, balance amount shall be recovered from any money(s) payable to Supplier/Vendor under any contract with other Units of BHEL including recovery from security deposits or any other deposit available in the form of security instruments of any kind against Security deposit or EMD.
  - c. In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against defaulted supplier/Vendor.
- vi) It is an agreed term of contract that this amount shall be a genuine pre-estimate of damages that BHEL would incur in completion of balance contractual obligation of the contract through any other agency and BHEL will not be required to furnish any other evidence to the Supplier/Vendor for the purpose of estimation of damages.
- vii) In addition to the above, imposition of liquidated damages, debarment, termination, de-scoping, short-closure, etc., shall be applied as per provisions of the contract.

Note: 1) The defaulting Supplier/Vendor shall not be eligible for participation in any of the future enquiries floated by BHEL to complete the balance work. The defaulting contractor shall mean and include:

(a) In case defaulted Supplier/Vendor is the Sole Proprietorship Firm, any Sole Proprietorship Firm owned by same Sole Proprietor.

(b) In case defaulted Supplier/Vendor is The Partnership Firm, any firm comprising of same partners/ some of the same partners; or sole proprietorship firm owned by any partner(s) as a sole proprietor.

Signature of the Authorized Signatory of the Bidder

Name:

Designation:

Stamp / Seal of Firm

**MAKE IN INDIA format (to be filled by OeMs of the participating bidders)****BHARAT HEAVY ELECTRICALS LIMITED, BHOPAL****MATERIAL MANAGEMENT – STEEL DIVISION**

*For this Procurement, Government of India Public Procurement (Preference to Make in India), Order 2017 with its amendments and subsequent Orders issued by the respective nodal ministries shall be applicable even if issued after issue of this NIT but before finalization of contract/PO/WO against this NIT.*

*As per the Provisions of this order, please submit a self-certification complying with the conditions below on company letterhead duly signed by competent authority.*

I ....., hereby declare on behalf of M/s. .... that we are participating in the Enquiry No. .... floated by BHEL, Bhopal (MP), India and shall comply with following:

Public Procurement (Preference to Make in India), Order 2017 *with its amendments* and subsequent Orders issued by the respective nodal ministries shall be applicable even if issued after issue of this NIT but before finalization of contract/PO/WO against this NIT.

- (a) A supplier will be treated as “**Class-I Local Suppliers**”, if the items quoted by bidder have local content equal to or more than 50%.
- (b) ‘**Local Content**’ means the amount of value added in India, which shall be total value of item quoted (excluding net domestic indirect taxes) minus the value of imported content in the item (including all custom duties) as a proportion of the total value, **in percent**.

We hereby certify that the quoted items offered by us against above Enquiry No. is having local content of..... %

Further, to certify that the local content % certified above is in line with definition of Local content given in point no 2 of Public Procurement (Preference to Make in India), Order 2017 dated 19.07.2024 and we qualify as Class —I. (Class-I/ CLASS-II/Non-Local supplier-fill in one which is applicable) local supplier. It is also certified that Repackaging/ Refurbishment/ Rebranding of imported products and the license fees/royalties paid/ technical charges paid out of India are not considered for calculation of local content and there is no such locally-sourced imported items.

The above declaration does not include services such as transportation, insurance, installation, commissioning, training and after sales service support like AME/CMC etc. as local value addition. We also understand, false declarations will be in breach of the Code of Integrity under Rule 175(1) (i) (h) of the General Finance Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Finance Rules along with such other actions as may be permissible under law.

We further confirm that details of location(s) in India at which the local value addition is made will be at

- a. ....
- b. ....

I hereby declare that the details furnished above are true and correct to the best of my knowledge and belief and I undertake to inform you of any changes therein, immediately. In case any of the above information is found to be false or untrue or misleading or misrepresenting, I am aware that I may be held liable for it.

(.....)

For M/s. ....

(Seal & Sign)

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	Department:	PWP SP-NUC-SRC-Factory IN					

Part Identification No.:	B753S80834P01	Rev. B	QA-Coordinator:	KUKRETI PRATYUSH	Production Order:	P000455250	Rev. B
Part Name:	ROUGH CONTACT PART (D=46-L=40)	Acceptance Authority:		Account:	-		
Product Q-Level:	B	Notification Periods:		Purchase Order:			
Unit:	GORAKHPUR 2	Measuring System:	SI Units	Factory Order:	EP1-920086-ST02-20560-00		
System:	ST	Q-Record Language:	EN	Factory Purchase Order:			

I&T Plan No.:	IT GTVR11204	Rev. MB	Life Cycle State:	Approved	Prepared:	P. KUKRETI	2025-09-12
I&T Plan Name:	PROC. HIGH DUTY FORGING	Originated From:	IT GBVR97235,EN,A,2	Checked:	S. PRABHAKARA	2025-09-16	
Variant:	M2117 - STV M12122			Approved:	S. PRABHAKARA	2025-09-16	
				Responsible Dept.:	NUCG		

No.	Description	Procedure	Rev.	Type of Q-Record	Q Activities			Remarks	Q-Record Number or Confirmation
					1)	2)	3)		
0.00	INSTRUCTION FOR USE OF IT PLANS	IBV Q10131	J						
0.10	NOTE: TWO SET OF HISTORY DOCKET/EOMR (IN ENGLISH LANGUAGE) SHALL BE PREPARED AFTER COMPLETION OF MANUFACTURING AS MENTIONED BELOW: -FOR INTERNAL: EOMR AS PER PRO-ORDER I&T PLAN NO. IT GTVR11204 -FOR CUSTOMER: EOMR AS PER CUSTOMER APPROVED QAP NO. GHAVP-1&2/QAP/41113/00031								
0.20	NOTE: PHYSICAL STAMP ON MATERIAL/ COMPONENT BY CUSTOMER (BHEL/NPCIL) IS HOLD POINT. -ALL MATERIAL/ COMPONENT SHALL BE STAMPED BY CUSTOMER. -MATERIAL / COMPONENT SHALL BE OFFERED TO CUSTOMER FOR RESTAMPING / STAMP TRANSFER BEFORE REMOVAL OF ORIGINAL STAMP.								
1.00	INITIAL DOCUMENTS AND CONFORMANCE:								
1.05	GENERAL REQUIREMENTS CONFORMANCE	754D91494	MB	STAMP	U	Y			
1.10	GORAKHPUR PROJECT GENERAL QUALITY REQUIREMENTS CONFORMANCE	GHP12S-----100-GS501	MG	STAMP	U	Y			



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No.	Description	Procedure	Rev.	Type of Q-Record	Q Activities			Remarks	Q-Record Number or Confirmation
					1)	2)	3)		
1.15	CUSTOMER APPROVED QAP NO. GHAVP-1&2/QAP/41113/00031	GHAVP-12QAP4111300031	-	STAMP	U	Y		CUSTOMER APPROVAL REQUIRED BEFORE START OF MANUFACTURING	
1.20	MANUFACTURING PROCESS PLAN (MPP)	STV M32101	B	RECORD	U	BH		APPROVAL REQUIRED BEFORE START OF MANUFACTURING	
1.25	QUALIFICATION OF N.D.E. PERSONNEL	GHP12S-----100--GS501 NTV MM0111	MG C	RECORD	U	B	Q	QUALIFICATION CERTIFICATES SHALL BE ADDED	
1.30	NDE PROCEDURES (INCLUDING RECORD FORMAT AND TECHNIQUE SHEET)	GHP12S-----100--GS501 GHP12S-----100--GS510 ITV RA0001 STV M42101	MG MA C D	RECORD	U	KH	Q	CUSTOMER APPROVAL REQUIRED BEFORE USE	
1.35	CALIBRATION REPORT OF INSTRUMENTS/GAUGES/HEAT TREATMENT FACILITY/TEMPERATURE RECORDER ETC. USED FOR MANUFACTURING AND INSPECTIONS	754D91494 GHP12S-----100--GS501	MB MG	RECORD	U	B	Q		
1.40	LABORATORY QUALIFICATION FOR MATERIAL TESTS NOTE: LABORATORY CERTIFICATION AS PER ISO/IEC 17025 BY NATIONAL ACCREDITATION BOARD FOR TESTING (NABL) FOR INDIAN LABS AND EQUIVALENT AGENCIES FOR FOREIGN LABS	GHP12S-----100--GS501	MG	RECORD	U	B	Q	CERTIFICATES SHALL BE PROVIDED	
1.45	MANUFACTURER'S TEST CERTIFICATES OF CHEMICAL USED FOR PENETRANT EXAMINATION OR MAGNETIC PARTICLE EXAMINATION	GHP12S-----100--GS501	MG	RECORD	U	B	Q	AS PER CUSTOMER APPROVED BRANDS	
1.55	PRE-INSPECTION MEETING (PIM)	754D91494	MB	STAMP	U	BH			
2.00	MANUFACTURING								

<b>Symbols Abbreviations</b>  1) Performed By 2) Acceptance By 3) Send Q-Record To Customer	L = Manufacturer B = Company placing the order U = Material supplier, supplier ext. products and ext. processes	V = Internal test VS = Acceptance by external authority S = Official acceptance authority	K = Customer or his representative	M = Witness Point H = Hold Point Q = Q record to K	IT GTVR11204
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="display: flex; align-items: center;"> <div> <p>The inspection and test plan does not release the subcontractor / manufacturer from his obligation to take all steps necessary to ensure that the requirements stipulated in drawings and specification are fulfilled for the product concerned.</p> </div> </div> <div style="text-align: center; flex-grow: 1;"> <p>© 2025 Areballe Solutions and/or its affiliates. All rights reserved.</p> <p style="font-size: 1.2em;">116</p> </div> <div style="text-align: right; flex-grow: 1;"> <p style="font-size: 1.2em; margin: 0;">Rev. MB</p> </div> </div>					

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No.	Description	Procedure	Rev.	Type of Q-Record	Q Activities			Remarks	Q-Record Number or Confirmation
					1)	2)	3)		
2.10	CHEMICAL ANALYSIS - CAST	STV M22117 STV M32101	C B	EN 10204 -3.1	U	B	Q		
2.20	FORGING RATIO	STV M32101	B	RECORD	U	B			
2.30	HEAT TREATMENT RECORD REVIEW (ACTUAL FURNACE TIME/TEMPERATURE CURVES SHALL ALSO BE PROVIDED)	STV M22117 STV M32101	C B	RECORD	U	B			
2.40	IDENTIFICATION MARKING OF FORGING, TEST BLOCK (BEFORE PARTING FROM FORG.) & TEST PIECES	STV M32101	B	RECORD	U	BM	Q	REFER 0.20 ALSO	
2.50	HARDNESS TEST	STV M22117 STV M32101	C B	EN 10204 -3.1	U	BM	Q		
2.60	TENSILE TEST	STV M22117 STV M32101	C B	EN 10204 -3.1	U	BM	Q		
2.70	IMPACT TEST	STV M22117 STV M32101	C B	EN 10204 -3.1	U	BM	Q		
3.00	NON-DESTRUCTIVE EXAMINATION:								
3.10	VISUAL EXAMINATION - 100%	GHP12S-----100- -GS510 STV M42101	MA D	EN 10204 -3.1	U	B			
3.20	MAGNETIC PARTICLE EXAMINATION OR PENETRANT EXAMINATION - 100%	GHP12S-----100- -GS510 STV M42101	MA D	EN 10204 -3.1	U	BM	Q	AS PER CUSTOMER APPROVED PROCEDURE	
3.30	ULTRASONIC EXAMINATION - 100%	GHP12S-----100- -GS510 STV M42101	MA D	EN 10204 -3.1	U	BM	Q	AS PER CUSTOMER APPROVED PROCEDURE	

<b>Symbols</b> <b>Abbreviations</b>	1) Performed By 2) Acceptance By 3) Send Q-Record To Customer	L = Manufacturer B = Company placing the order U = Material supplier, supplier ext. products and ext. processes	Y = Internal test YS = Acceptance by external authority S = Official acceptance authority	K = Customer or his representative	M = Witness Point H = Hold Point Q = Q record to K
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IT GTVR11204

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Production Order:		P000455250	Rev.	B	Part Identification No.:	B753S80834P01		Rev.	B	I&T Plan No.:	IT GTVR11204	Rev.	MB

No.	Description	Procedure	Rev.	Type of Q-Record	Q Activities			Remarks	Q-Record Number or Confirmation
					1)	2)	3)		
4.00	N.D.E. OF LIFTING POINTS - 100%	GHP12S-----100-- -GS510 ITV RA0001	MA  C	EN 10204 -3.1	U	BM	Q	IF ANY LIFTING POINT AS PER CUSTOMER APPROVED PROCEDURE	
6.00	GEOMETRIC AND DIMENSIONAL INSPECTION			RECORD	U	B		DRAWING	
7.00	CLEANLINESS AND PROTECTION	GHP12S-----100-- -GS401 IBV VE0006	ME  F	STAMP	U	B		SEE ALSO ORDER	
8.00	DOCUMENTATION								
8.10	DECLARATION OF CONFORMITY			RECORD	U	B	Q		
8.20	VERIFICATION OF ELEMENTARY CONFORMANCE FILE REDACTION OF THE DOCUMENTS IN ENGLISH	NTV MM0111	C	STAMP	U	BH			
8.30	ISSUE OF INSPECTION RELEASE NOTE (IRN) BY CUSTOMER -COMPLETION OF RELEVANT QAP CLAUSES & REVIEW OF DOCUMENTS AS PER CUSTOMER APPROVED QAP NO. GHAVP-1&2/QAP/41113/00031	GHAVP-12QAP4111 300031	-	RECORD	U	KH	Q	IF SHIPPING IS REQUIRED	
8.40	PREPERATION AND SUBMISSION OF HISTORY DOCKET/ END OF MANUFACTURING REPORT (EOMR) AS PER PRO-ORDER I&T PLAN NO. IT GTVR11204	GHP12S-----100-- -GS501	MG	RECORD	U	B		MENTION INTERNAL EOMR REFERENCE IN Q-RECORD CONFIRMATION	
8.50	PREPERATION AND SUBMISSION OF HISTORY DOCKET AS PER CUSTOMER APPROVED QAP NO. GHAVP-1&2/QAP/41113/00031	GHAVP-12QAP4111 300031	-	RECORD	U	K	Q	MENTION CUSTOMER EOMR REFERENCE IN Q-RECORD CONFIRMATION	

<b>Symbols</b> Abbreviations	1) Performed By 2) Acceptance By 3) Send Q-Record To Customer	L = Manufacturer B = Company placing the order U = Material supplier, supplier ext. products and ext. processes	Y = Internal test YS = Acceptance by external authority S = Official acceptance authority	K = Customer or his representative M = Witness Point H = Hold Point Q = Q record to K	
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p><b>arabelle solutions</b> EDF GROUP</p> </div> <div style="text-align: center;"> <p style="font-size: 0.7em;">The inspection and test plan does not release the subcontractor / manufacturer from his obligation to take all steps necessary to ensure that the requirements stipulated in drawings and specification are fulfilled for the product concerned.</p> <p style="font-size: 0.7em;">© 2025 Arabelle Solutions and/or its affiliates. All rights reserved.</p> </div> <div style="text-align: center;"> <p style="font-size: 1.2em; font-weight: bold;">118</p> </div> </div>					
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No.	Description	Procedure	Rev.	Type of Q-Record	Q Activities			Remarks	Q-Record Number or Confirmation
					1)	2)	3)		
8.60	ISSUE OF SHIPPING RELEASE NOTE (SRN) BY CUSTOMER - COMPLETION OF QAP CLAUSES, REVIEW OF IRN AND DOCUMENTS AS PER CUSTOMER APPROVED QAP NO. GHAVP-1&2/QAP/41113/00031	GHAVP-12QAP4111 300031	-	RECORD	U	KH	Q	IF SHIPPING IS REQUIRED	

# INSPECTION AND TEST PLAN

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Part Identification No.:	D752S70106P01	Rev. H	QA-Coordinator:	KUKRETI PRATYUSH	Production Order:	P000455250	Rev. B
Part Name:	TRUNNION		Acceptance Authority:		Account:	-	
Product Q-Level:	B		Notification Periods:		Purchase Order:		
Unit:	GORAKHPUR 2		Measuring System:	SI Units	Factory Order:	EP1-920086-ST02-20560-00	
System:	ST		Q-Record Language:	EN	Factory Purchase Order:		


I&T Plan No.:	IT GTVR11218	Rev. MB	Life Cycle State:	Approved	Prepared:	P. KUKRETI	2025-09-13
I&T Plan Name:	PROC. HIGH DUTY FORGING		Originated From:	IT GBVR97235,EN,A,2	Checked:	S. PRABHAKARA	2025-09-16
Variant:	M2117 - STV M12122				Approved:	S. PRABHAKARA	2025-09-16
					Responsible Dept.:	NUCG	

No.	Description	Procedure	Rev.	Type of Q-Record	Q Activities			Remarks	Q-Record Number or Confirmation
					1)	2)	3)		
0.00	INSTRUCTION FOR USE OF IT PLANS	IBV Q10131	J						
0.10	NOTE: TWO SET OF HISTORY DOCKET/EOMR (IN ENGLISH LANGUAGE) SHALL BE PREPARED AFTER COMPLETION OF MANUFACTURING AS MENTIONED BELOW: -FOR INTERNAL: EOMR AS PER PRO-ORDER I&T PLAN NO. IT GTVR11218 -FOR CUSTOMER: EOMR AS PER CUSTOMER APPROVED QAP NO. GHAVP-1&2/QAP/41113/00031								
1.00	INITIAL DOCUMENTS AND CONFORMANCE:								
1.05	GENERAL REQUIREMENTS CONFORMANCE	754D91494	MB	STAMP	U	Y			
1.10	GORAKHPUR PROJECT GENERAL QUALITY REQUIREMENTS CONFORMANCE	GHP12S-----100--GS501	MG	STAMP	U	Y			
1.15	CUSTOMER APPROVED QAP NO. GHAVP-1&2/QAP/41113/00031	GHAVP-12QAP4111300031	-	STAMP	U	Y			
1.20	MANUFACTURING PROCESS PLAN (MPP)	STV M32101	B	RECORD	U	BH		APPROVAL REQUIRED BEFORE START OF MANUFACTURING	
1.25	QUALIFICATION OF N.D.E. PERSONNEL	GHP12S-----100--GS501 NTV MM0111	MG C	RECORD	U	B		QUALIFICATION CERTIFICATES SHALL BE ADDED	

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Production Order:	P000455250	Rev. B	Part Identification No.:	D752S70106P01	Rev. H	I&T Plan No.:	IT GTVR11218	Rev. MB
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No.	Description	Procedure	Rev.	Type of Q-Record	Q Activities			Remarks	Q-Record Number or Confirmation
					1)	2)	3)		
1.30	NDE PROCEDURES (INCLUDING RECORD FORMAT AND TECHNIQUE SHEET)	GHP12S-----100-- -GS501 GHP12S-----100-- -GS510 ITV RA0001 STV M42101	MG  MA  C D	RECORD	U	BH		APPROVAL REQUIRED BEFORE USE	
1.35	CALIBRATION REPORT OF INSTRUMENTS/GAUGES/HEAT TREATMENT FACILITY/TEMPERATURE RECORDER ETC. USED FOR MANUFACTURING AND INSPECTIONS	754D91494 GHP12S-----100-- -GS501	MB MG	RECORD	U	B	Q		
1.40	LABORATORY QUALIFICATION FOR MATERIAL TESTS NOTE: LABORATORY CERTIFICATION AS PER ISO/IEC 17025 BY NATIONAL ACCREDITATION BOARD FOR TESTING (NABL) FOR INDIAN LABS AND EQUIVALENT AGENCIES FOR FOREIGN LABS	GHP12S-----100-- -GS501	MG	RECORD	U	B	Q	CERTIFICATES SHALL BE PROVIDED	
1.45	MANUFACTURER'S TEST CERTIFICATES OF CHEMICAL USED FOR PENETRANT EXAMINATION OR MAGNETIC PARTICLE EXAMINATION	GHP12S-----100-- -GS501	MG	RECORD	U	B		AS PER CUSTOMER APPROVED BRANDS	
1.55	PRE-INSPECTION MEETING (PIM)	754D91494	MB	STAMP	U	BH			
2.00	<b>MANUFACTURING</b>								
2.10	CHEMICAL ANALYSIS- EACH MELT	STV M22117 STV M32101	C B	EN 10204 -3.1	U	B	Q		
2.20	FORGING RATIO	STV M32101	B	RECORD	U	B			
2.30	HEAT TREATMENT RECORD REVIEW (ACTUAL FURNACE TIME/TEMPERATURE CURVES SHALL ALSO BE PROVIDED)	STV M22117 STV M32101	C B	RECORD	U	B			
2.40	IDENTIFICATION MARKING OF FORGING & TEST PIECES NOTE: MATERIAL & TEST PIECES CO-RELATION & TRACEABILITY SHALL BE ENSURED AND RECORDED	STV M32101	B	RECORD	U	BM			
2.50	HARDNESS TEST	STV M22117 STV M32101	C B	EN 10204 -3.1	U	BM	Q		

<b>Symbols Abbreviations</b> 1) Performed By 2) Acceptance By 3) Send Q-Record To Customer  	L = Manufacturer B = Company placing the order U = Material supplier, supplier ext. products and ext. processes  The inspection and test plan does not release the subcontractor / manufacturer from his obligation to take all steps necessary to ensure that the requirements stipulated in drawings and specification are fulfilled for the product concerned.	Y = Internal test YS = Acceptance by external authority S = Official acceptance authority  © 2025 Arabelle Solutions and/or its affiliates. All rights reserved.	K = Customer or his representative  521	M = Witness Point H = Hold Point Q = Q record to K  IT GTVR11218	Rev. MB

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	Department:	PWP SP-NUC-SRC-Factory IN			
					Sheet No.: <b>3</b> <b>4</b>

Production Order:	P000455250	Rev. B	Part Identification No.:	D752S70106P01	Rev. H	I&T Plan No.:	IT GTVR11218	Rev. MB
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No.	Description	Procedure	Rev.	Type of Q-Record	Q Activities			Remarks	Q-Record Number or Confirmation
					1)	2)	3)		
2.60	TENSILE TEST	STV M22117 STV M32101	C B	EN 10204 -3.1	U	BM	Q		
2.70	IMPACT TEST	STV M22117 STV M32101	C B	EN 10204 -3.1	U	BM	Q		
3.00	NON-DESTRUCTIVE EXAMINATION:								
3.10	VISUAL EXAMINATION - 100%	GHP12S-----100-- -GS510 STV M42101	MA  D	EN 10204 -3.1	U	B			
3.20	MAGNETIC PARTICLE EXAMINATION OR PENETRANT EXAMINATION - 100%	GHP12S-----100-- -GS510 STV M42101	MA  D	EN 10204 -3.1	U	B		AS PER APPROVED PROCEDURE	
3.30	ULTRASONIC EXAMINATION - 100%	GHP12S-----100-- -GS510 STV M42101	MA  D	EN 10204 -3.1	U	BM		AS PER APPROVED PROCEDURE	
4.00	N.D.E. OF LIFTING POINTS - 100%	GHP12S-----100-- -GS510 ITV RA0001	MA  C	EN 10204 -3.1	U	B		IF ANY LIFTING POINT AS PER APPROVED PROCEDURE	
6.00	GEOMETRIC AND DIMENSIONAL INSPECTION			RECORD	U	B		DRAWING	
7.00	CLEANLINESS AND PROTECTION	GHP12S-----100-- -GS401 IBV VE0006	ME  F	STAMP	U	B		SEE ALSO ORDER	
8.00	DOCUMENTATION								
8.10	DECLARATION OF CONFORMITY			RECORD	U	B	Q		
8.20	VERIFICATION OF ELEMENTARY CONFORMANCE FILE REDACTION OF THE DOCUMENTS IN ENGLISH	NTV MM0111	C	STAMP	U	BH			

<b>Symbols Abbreviations</b> 1) Performed By 2) Acceptance By 3) Send Q-Record To Customer	L = Manufacturer B = Company placing the order U = Material supplier, supplier ext. products and ext. processes	Y = Internal test YS = Acceptance by external authority S = Official acceptance authority	K = Customer or his representative	M = Witness Point H = Hold Point Q = Q record to K	<div style="font-size: 24px; font-weight: bold; margin-bottom: 10px;">IT GTVR11218</div> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> </div> <div style="text-align: center;"> <p style="font-size: 12px; margin: 0;">The inspection and test plan does not release the subcontractor / manufacturer from his obligation to take all steps necessary to ensure that the requirements stipulated in drawings and specification are fulfilled for the product concerned.</p> <p style="font-size: 10px; margin: 0;">© 2025 Arabelle Solutions and/or its affiliates. All rights reserved.</p> </div> <div style="text-align: center;"> <div style="font-size: 24px; font-weight: bold; margin-bottom: 10px;">122</div> </div> </div>
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No.	Description	Procedure	Rev.	Type of Q-Record	Q Activities			Remarks	Q-Record Number or Confirmation
					1)	2)	3)		
8.30	ISSUE OF INSPECTION RELEASE NOTE (IRN) BY CUSTOMER -COMPLETION OF RELEVANT QAP CLAUSES & REVIEW OF DOCUMENTS AS PER CUSTOMER APPROVED QAP NO. GHAVP-1&2/QAP/41113/00031	GHAVP-12QAP4111 300031	-	RECORD	U	KH	Q	IF SHIPPING IS REQUIRED	
8.40	PREPERATION AND SUBMISSION OF HISTORY DOCKET/ END OF MANUFACTURING REPORT (EOMR) AS PER PRO-ORDER I&T PLAN NO. IT GTVR11218	GHP12S-----100- -GS501	MG	RECORD	U	B		MENTION INTERNAL EOMR REFERENCE IN Q-RECORD CONFIRMATION	
8.50	PREPERATION AND SUBMISSION OF HISTORY DOCKET AS PER CUSTOMER APPROVED QAP NO. GHAVP-1&2/QAP/41113/00031	GHAVP-12QAP4111 300031	-	RECORD	U	K	Q	MENTION CUSTOMER EOMR REFERENCE IN Q-RECORD CONFIRMATION	
8.60	ISSUE OF SHIPPING RELEASE NOTE (SRN) BY CUSTOMER - COMPLETION OF QAP CLAUSES, REVIEW OF IRN AND DOCUMENTS AS PER CUSTOMER APPROVED QAP NO. GHAVP-1&2/QAP/41113/00031	GHAVP-12QAP4111 300031	-	RECORD	U	KH	Q	IF SHIPPING IS REQUIRED	

<b>Symbols</b> Abbreviations  	1) Performed By 2) Acceptance By 3) Send Q-Record To Customer  L = Manufacturer B = Company placing the order U = Material supplier, supplier ext. products and ext. processes  Y = Internal test YS = Acceptance by external authority S = Official acceptance authority  K = Customer or his representative  M = Witness Point H = Hold Point Q = Q record to K	IT GTVR11218	
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	Resp. Dept.: 8300	Replaces:	Revision: C	Doc Type: EC	File no.:	
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**Material Specification:**  
**685 N/mm<sup>2</sup> min Rp0.2, 40CrAlMo6-10 steel**

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## 1 General

### 1.1 Definitions

- 1) General Electric: Employees of General Electric or its designated representative.
- 2) Shall: This word is used to indicate mandatory requirements strictly to be followed in order to conform to the specification and from which no deviation is permitted.
- 3) Supplier: Company or factory to which inquiry or order is awarded.
- 4) Wrought product form: refers to steel which has undergone mechanical deformation to achieve final product form such as by forging, extrusion, and rolling (plates, strips, pipe, bar).

### 1.2 Foreseen application and purpose

This specification is applicable for wrought product forms of low alloy steel.

### 1.3 Categories and criticality

- 1) All requirements of this specification shall be fully complied with.
- 2) It is critical to General Electric that all relevant records are retained and where required are submitted to General Electric. If General Electric does not request the transmission of such records, the supplier shall ensure that these records are maintained in accordance with the terms and conditions of the order placed and / or international legislation.

## 2 Material properties requirements

### 2.1 Chemical composition

Limiting composition (melt analysis) in mass % shall be as defined in Table 1.

Table 1: Limiting chemical composition

Element	Symbol	Range (mass %)
Carbon	C	0.36 to 0.43
Silicon	Si	0.10 to 0.40
Manganese	Mn	0.50 to 0.80
Phosphorus	P	max. 0.035
Sulphur	S	max. 0.035
Chromium	Cr	1.50 to 1.80
Aluminium	Al	0.80 to 1.30
Molybdenum	Mo	0.20 to 0.40

## 2.2 Mechanical properties

Mechanical property requirements at 23°C ± 5°C shall be as defined in Table 2.

Table 2: Limiting mechanical properties

Property	Unit	Orientation	Range
Tensile strength (Rm)	N/mm <sup>2</sup>	long./trans.	900 to 1050
0.2% Proof strength (Rp0.2)	N/mm <sup>2</sup>	long./trans.	min. 685
Elongation on 5.65√So (A)	%	long./trans.	min. 15
Notch impact strength (KV)	J	long./trans.	min. 48
Brinell hardness	HBW	-	265 to 310

## 3 Form, fit and function requirements

This section is not applicable to this specification.

## 4 Testing and verification requirements

This section is not applicable to this specification.

## 5 Process requirements

### 5.1 Specific process requirements

#### 5.1.1 Quality heat treatment

Table 3: Heat treatment cycle

Process	Unit	Range
Austenitising	°C	900 to 950
Soaking time	Minutes	min. 30
Cooling method		Air cooled, oil quenched or water-spray quenched
Tempering	°C	630 to 680
Soaking time	Hours	min. 4
Stress relieving <sup>1)</sup>	°C	600 to 680
Soaking time	Hours	min. 2

<sup>1)</sup> Stress relieving is only required when the product is cold straightened.

## 6 Associated standards

This section is not applicable to this specification.

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## 7 Transportation and logistic requirements

This section is not applicable to this specification.

## 8 Notes

### 8.1 Identification of changes

Revision	Date	Changes made
C	2018-01-15	Template updated. Mechanical properties in transverse direction added.

## 9 Appendices

This section is not applicable to this specification.

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