



**SERIES-1 FREIGHT CONTAINER – GENERAL CARGO CONTAINER FOR  
GENERAL PURPOSES**

**1.0 GENERAL**

This specification covers the requirements of General Cargo Containers for transportation of goods/equipment from vendor works to project sites by road/rail/sea route and for storage of items at various project sites.

**2.0 QUALITY REQUIREMENTS:**

2.1 Quality of container should comply in general with following IS/ISO standards:

- IS 7694/ISO 1161:1984(E) Series 1 Freight Containers, Corner Fittings Specification
- IS 6928/ISO 6346:1995(E) Freight Containers Coding Identification and Marking,
- IS 13288: Part 1/ISO 1496-Part 1: For Series 1 Containers-
- CSC & TIR Requirement,
- UIC 591,592

2.2 The dimensions & weight of preferred General Cargo Container to be used by BHEL are as follows:

a) 20' General Cargo Container for General Purposes




External Dimensions		20'x8'x8'6" – 6058 x 2438 x 2591 mm
Door Opening	Height	2278 mm
	Width	2340 mm
Maximum Gross Weight		30,480 Kgs
Tare Weight		2,300 Kgs
Payload		28,180 Kgs

b) 40' General Cargo Container for General Purposes

External Dimensions		40'x8'x8'6" – 12,192 x 2438 x 2591 mm
Door Opening	Height	2278 mm
	Width	2340 mm
Maximum Gross Weight		30,480 Kgs
Tare Weight		3,820 Kgs
Payload		26,660 Kgs

Actual sizes to be procured will be mentioned in the purchase order.

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Refer Doc	LAYOUTS & PIPING ENGINEERING	PREPARED	CHECKED	APPROVED	DATE
	PROJECT ENGINEERING & SYSTEMS DIVISION	 G PARAMESH	 SRIKANTH G	 SRIKANTH G	23.02.2019


**3.0 PACKING AND MARKING:**

Marking should be in line with **IS 6928**. Also, each Container shall be legibly marked at one corner on one side with the following:

- Supplier's name
- Batch number, year of manufacture
- Type and size

**4.0 REFERRED STANDARD:**

IS 7694/ISO 1161:1984(E) Series 1 Freight Containers, Corner Fittings Specification.



IS 6928/ISO 6346:1995(E) Freight Containers Coding Identification and Marking.

IS 13288: Part 1/ISO 1496-Part 1: For Series 1 Containers-

**5.0 CONTAINER VARIANTS:**

Variant No.	Description	External Dimensions	Material code
01	20' General Cargo Container	20' x 8' x 8' 6" 6058 x 2438 x 2591 mm	PY9752269010
02	40' General Cargo Container	40' x 8' x 8' 6" 12192 x 2438 x 2591 mm	PY9752269XXX

**RECORD OF REVISIONS:**

Rev No	Date	Revision Detail	Revised by	Approved by
00	23.02.2019	FIRST ISSUE	 G PARAMESH	 SRIKANTH G



**BHARAT HEAVY ELECTRICALS LIMITED  
PROJECT ENGINEERING & SYSTEMS DIVISION**

**PEMC-07597**

Form No:

**JOB SPECIFICATION**

Rev. No. 00

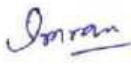


**GENERAL CARGO CONTAINER**

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**JOB SPECIFICATION  
FOR  
GENERAL CARGO CONTAINER**

<b>Project :</b>	<b>1x660 MW Panki TPS Extn</b>
<b>Customer :</b>	<b>M/s .UPRVUNL</b>

Refer Doc	<b>LAYOUTS &amp; PIPING ENGINEERING</b>	PREPARED	CHECKED	APPROVED	DATE
		 IMRAN	 G UDAY KUMAR	 SRIKANTH G	20.02.22

**1.0 GENERAL**

- 1.1 This job specification document specifies the requirements of General Cargo container for 1x660 MW Panki TPS Extn.
- 1.2 Bidder shall read this document in conjunction with "Technical Specification for General Cargo container (Doc.No.PY52269), for the technical requirements, scope of supply & services, design criteria, requirements of quality, inspection & testing, documentation etc.
- 1.3 Bidder shall comply with all the requirements specified in the documents referred above.

**2.0 LEGEND / GLOSSARY OF TERMS**

Purchaser	: BHEL
Owner	: BHEL's Customer
Bidder	: Eligible vendors from whom offers are received against the Enquiry
Vendor	: Successful Bidder of the Package on whom Order is placed

**3.0 SCOPE OF SUPPLY / SERVICES**

- 3.1 **Bidders to supply used Cargo Container for storage of items at project site. It should be in healthy condition suitable for use for considerable time in future.**
- 3.2 Quality of of container should comply in general with following IS/ISO standards:
- IS 7694/ISO 1161:1984(E) Series 1 Freight Containers, Corner Fittings Specification
  - IS 6928/ISO 6346:1995(E) Freight Containers Coding Identification and Marking
  - IS 13288: Part 1/ISO 1496-Part 1: For Series 1 Containers-
  - CSC & TIR Requirement
  - UIC 591,592
- 3.3 All the other details shall be as specified in "Technical Specification for General Cargo containers" (Doc.No. PY52269).
- 3.4 Container size for this enquiry shall be 20' General Cargo Container and dimensions as per the Cl 2.2(a), PY52269.

**4.0 IMPORTANT INSTRUCTIONS TO BIDDER**

Bidder shall mandatorily submit the following documents along-with Technical offer, failing which bidder's offer is liable for rejection.

- 4.1 Unpriced Price-bid Format
- 4.2 Deviation Schedule ("NIL" to be mentioned, if no deviations)
- 4.3 Stamped & Signed copies of Technical Specification for General Cargo container (PY52269) and Job Specification for Cargo container for storage (PEMC-07597).
- 4.4 Pre-bid queries, if any (within 4 days of receipt of enquiry from purchaser, failing which it is presumed that bidder does not have any pre-bid queries)

Form No:



**BHARAT HEAVY ELECTRICALS LIMITED  
PROJECT ENGINEERING & SYSTEMS DIVISION**

**PEMC-07597**

**JOB SPECIFICATION**



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4.5 In case of ambiguity of any technical requirement among the above referred documents, a clarification/ query shall be raised by the bidder and get clarified from Purchaser during pre-bid stage itself.

**5.0 RECORD OF REVISIONS**

Rev No	Date	Revision Detail	Revised by	Approved by
00	24.02.2022	FIRST ISSUE	 IMRAN	 SRIKANTH G

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## **GUIDELINES TO VENDORS FOR PREPARATION OF QUALITY ASSURANCE PLAN**

PAGE 1 OF 2

1. QAP shall be made in landscape mode on A4 size paper as per the format enclosed. Font size shall be minimum 10.
2. Each page of QAP shall contain the following information.
  - a) Vendor's name & address.
  - b) Customer: BHEL, Hyderabad.
  - c) Project.
  - d) BHEL Product Standard Number/revision number as referred in P.O.
  - e) BHEL Purchase Order Number & Date.
  - f) Product as per P.O. description.
  - g) QAP Number (unique and shall not repeat)/revision number/date.
  - h) Page number and number of pages
3. QAP shall contain four parts / stages as follows.
  - A) Raw materials and bought out items.
  - B) Inprocess Control / Inspection.
  - C) Final assembly, Inspection & Testing.
  - D) Painting, preservation & packing.
4. Under 'Component', indicate name of the component (say casing, rotor, pressure gauge, etc).
5. Under 'Characteristics', indicate appropriately (say chemical analysis, mechanical properties, NDT (UT,DP etc), Hydrostatic test, calibration check etc.)
6. Under 'Class', indicate minor, major or critical depending on the importance of characteristic.
7. Under 'Type of check', indicate appropriately (say chemical, mechanical, UT, DP etc.)
8. Under 'Quantum of check', indicate appropriately (say 100%, 10%, sample, per melt, per heat, all pieces etc.)
9. Under 'Reference document' and 'Acceptance norms', appropriate National & International standards, BHEL standards, approved drg references etc should be indicated. It is not correct to mention as "Vendor's internal standards or Vendor's standard practise etc". If vendors' internal standards are referred, same shall be in line with BHEL Spec. indicated in the P.O. These may require review & approval by our Engineering dept.
10. Under 'Format of record', indicate appropriately supplier's Test certificate, calibration certificate, lab report, inspection report etc.
11. Please refer 'Agency' in QAP format.

"Under P: Perform, W: Witness, V: Verify  
Indicate against each characteristic 1: (BHEL CQS/Nominated inspection agency), OR  
2: (Vendor / Sub vendor)  
Note: Performing agency is normally vendor or his sub vendor (Legend 2). Where witness points are indicated in specification, P.O., Drawing etc., for such operations, under Witness (W) column use 1. Under 'Verify' column, use code1
12. Under 'D' please put (4 Tick) against each characteristic where vendor proposes to submit test certificate/report etc OR as required as per BHEL Spec.
13. Vendor's signature & stamp should be available on each page of QAP.
14. Vendor should read the BHEL Product Standard thoroughly and QAP should be made only inline and relevant to the Specification & Approved Drgs.

## **GUIDELINES TO VENDORS FOR PREPARATION OF QUALITY ASSURANCE PLAN**

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15. The following operations/characteristics/check points may be included (**AS APPROPRIATE**)

- a) Visual check
- b) Dimensional check
- c) Mechanical and Chemical properties.
- d) Surface preparation before painting (by chemical cleaning, sand blasting, shot blasting etc as the case may be.)
- e) Painting check for shade, Dry Film Thickness (DFT), Adhesion/ peeloff test etc.
- f) Check for correctness for all components mounted as per General arrangement Drg, Bill Of Materials (BOM), etc for range, rating, make, color, size, location as per GA, quantity, label description including tag nos., annunciator facia, loose components, accessories, spares etc.
- g) Verification of test certificate for protection class for the enclosures.
- h) Mechanical functioning of switches.
- i) Continuity of earthing and provision of earth points.
- j) Colour coding of wiring, size, tightness & dressing of wiring.
- k) Review of test certificates of assembled items, raw materials, internal test reports etc.
- l) Witness of functional checks, which may include mechanical run & electrical run, H.V.test, IR measurement, Electrical and Mechanical tests etc.
- m) PQR, WPS, Welder Qualification Record, welding records (fitup, DP) etc.
- n) Material identification ( for punch marks of serial numbers, Heat No, Melt No, Inspector's stamp etc)
- o) Hydraulic Pressure Test, Pneumatic Pressure Test, Liquid Penetration Examination and other Non Destructive Tests.
- p) Tests on Galvanised items (Visual, Hammer Test, Knife Test, Thickness, Preece Test (Copper sulphate test), Hydrogen evaluation test, Stripping test (for Mass of Zinc coating)
- q) All tests as per BHEL Product Standard & approved drawings including Type tests and Routine tests on individual items and on System as a whole.
- r) Packing and Preservation.