



भारत सरकार/Government of India
अंतरिक्ष विभाग/Department of Space
द्रव नोदन प्रणाली केंद्र
LIQUID PROPULSION SYSTEMS CENTRE
एच ए एल II स्टेज, 80 फीट रोड
HAL II STAGE, 80 FEET ROAD,
बेंगलूरु/BANGALORE-560 008.
फोन सं./Phone No.080 25037171/140
ई-मेल/Email: purchase@lpscb.gov.in



दिनांक/Date: 08.07.2025

लोक निविदा सूचना सं. एल बी2025000225-01 दिनांक 08.07.2025
PUBLIC TENDER NOTICE NO. LB2025000225-01 DATED 08.07.2025

390L एवं 650L अंतरिक्षयान नोदन टंकी के भंडारण एवं परिवहन के लिए हल्के भार वाले ऐलुमिनियम कंटेनरों की अभिकल्पना, विकास, संविरचन, वेल्डिंग, समापन एवं आपूर्ति के लिए निविदा।

Tender for Design, development, fabrication, welding, finishing and supply of light weight aluminum containers for storage and transportation of 390L & 650L Spacecraft propellant tanks

निविदा वर्गीकरण: लोक निविदा
Tender Classification: PUBLIC TENDER

निविदा की निर्धारित तिथियाँ/TENDER SCHEDULE

बोली प्रस्तुति की आरंभिक तिथि/Bid Submission Start Date	: 08.07.2025 17:00
बोली स्पष्टीकरण की नियत तिथि/Bid Clarification Due Date	: 22.07.2025 17:00
बोली प्रस्तुतीकरण की नियत तिथि/Bid Submission Due Date	: 29.07.2025 14:00
बोली खुलने की तिथि/Bid Opening Date	: 29.07.2025 14:30
मूल्य बोली खुलने की तिथि / Price Bid Opening Date	: 13.08.2025 14:00

निविदा दस्तावेज़ <https://www.isro.gov.in/> OR <https://eproc.vssc.gov.in> या इसरो ई-प्रापण पोर्टल से डाउनलोड किए जा सकते हैं।/Tender documents can be downloaded from <https://www.isro.gov.in/> OR <https://eproc.vssc.gov.in> or ISRO E-Procurement Portal.

हस्ताक्षरित/Signed
क्रय व भंडार अधिकारी/Purchase & Stores Officer

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
LIQUID PROPULSION SYSTEMS CENTRE (LPSC-B)
BANGALORE**

Tender for Design, development, fabrication, welding, finishing and supply of light weight aluminum containers for storage and transportation of 390L & 650L Spacecraft propellant tanks

Bids to be submitted online

**Tender No.: LPSC-B/Liquid Propulsion Systems Centre,
Bengaluru/LB202500022501 dated 08-07-2025**

A. Tender Details

Tender No :	LPSC-B/Liquid Propulsion Systems Centre, Bengaluru/LB202500022501
Tender Date :	08-07-2025
Tender Classification:	GOODS
Purchase Entity :	Liquid Propulsion Systems Centre, Bengaluru
Centre :	LIQUID PROPULSION SYSTEMS CENTRE (LPSC-B)

Design, development, fabrication, welding, finishing and supply of light weight aluminum containers for storage and transportation of 390L & 650L Spacecraft propellant tanks

Design, development, fabrication, welding, finishing and supply of light weight aluminum containers for storage and transportation of 390L & 650L Spacecraft propellant tanks

A.1 Tender Schedule

Bid Submission Start Date :	08-07-2025 17:00
Bid Clarification Due Date :	22-07-2025 17:00
Bid Submission Due Date :	29-07-2025 14:00
Bid Opening Date :	29-07-2025 14:30
Price Bid Opening Date :	13-08-2025 14:00

B. Tender Attachments

NA

Instructions To Vendors

1. Instructions to Vendors

1. LPSC(B) invites offers through eprocurement portal (<https://eproc.isro.gov.in>) for the supply / service of items as listed in the Tender document.

2. Prospective vendors interested in participating in the tendering process need to get registered in the e-procurement portal by using Digital Signature Certificate. Offers submitted through our online portal only shall be considered and offers received through fax or email or in person shall not be considered.

3. The Tenderers are requested to update their address and contact details, if necessary and submit the Bids online at least two days prior to closing date to avoid last minute system / network related problems. In case of any technical issues, tenderers may write to helpdesk team (eprocure@vssc.gov.in, egps@lpscb.gov.in) for resolution. Request for the extension of the due date for such instances shall not be considered.

4. GST @ 5% is applicable for following goods mentioned under Sl. No. 243B as per Department of Revenue Notification No. 25/2018 - Integrated Tax (Rate) dated 31/12/2018 (Amendment to Notification Nos. 07/2018 dated 25/01/2018 and 01/2017 dated 28/06/2017) and Department of Revenue Notification No. 24/2018 - Central Tax (Rate) dated 31/12/2018 (Amendment to Notification Nos. 06/2018 dated 25/01/2018 and 01/2017 dated 28/06/2017) and Government of Karnataka Notification No. 24/2018 dated 31/12/2018 (Amendment to Notification Nos. 06/2018 dated 25/01/2018 and 01/2017 dated 29/06/2017).

"Scientific and technical instruments, apparatus, equipment, accessories, parts, components, spares, tools, mock ups and modules, raw material and consumables required for Launch Vehicles and Satellites and Payloads"

5. LPSC(B), ISRO is eligible for Customs Duty Concession vide Notification No. 50/2017-Customs dated 30/06/2017 (Sl. No. 539), Notification No. 5/2018-Customs dated 25/01/2018 (Sl. No. 539A) and Notification No. 05/2025-Customs dated 01/02/2025 (Sl. No. 539A). Necessary Customs Duty Concession Certificate shall be provided if applicable.

6. Offer Validity: The offer shall be valid for a period of 90 days (for Single Part Tender) and 120 days (for Two Part Tender) from the date of opening of the tender or any other period as specified in the Tender document. Offers with lesser validity period than that specified are liable for exclusion from the

procurement process.

7. In case of Two Part Tender, Tenderers shall not mention any kind of price element in Techno-Commercial Bid. If any Price element is mentioned in the Techno-Commercial bid, their offer shall be liable for rejection.

8. LPSC(B) reserves the right to accept or reject any quotation in part or in full or part without assigning any reason thereof. LPSC(B) shall be under no obligation to accept the lowest tender and reserves the right to accept whole or any part of the tender or part of the quantity offered and the Tenderers shall supply the same at the rates quoted.

9. Bank Details: Tenderer shall provide their bank details such as IFSC code, IBAN No. , SWIFT etc. along with their offer which shall be not be changed till completion of supply/service.

10. Applicable Law: The Contract shall be governed by Indian Law for the time being in force and jurisdiction shall lie in the Courts of India.

11. Only Class-I and Class-II Local suppliers as per Public Procurement Policy (Preference to Make in India) Order, 2017 are eligible to participate in the bid unless otherwise specified in the Tender document.

12. As far as implementation of Public Procurement Policy (Preference to Make in India) Order, 2017 is concerned, the Office Orders vide No. P-45021/2/2017-B.E-II dated 15/06/2017, which is partially modified by Order No. P-45021/2/2017-PP(BE-II) dated 28/05/2018, Order No. P-45021/2/2017-PP(BE-II) dated 29/05/2019, Order No. P-45021/2/2017-PP (BE-II) dated 04/06/2020 and Order No. P-45021/2/2017-PP (BE-II) dated 16/09/2020 and subsequent Amendments issued by the Department for Promotion of Industries and Internal Trade (DPIIT), Ministry of Commerce and Industry regarding Class-I / Class-II local suppliers, Purchase preference, verification of local contents etc. shall be applicable to this tender unless otherwise specified in the Tender document.

Therefore, bidders may ensure compliance of the same while submitting tenders.

13. Price Preference shall be extended to the MSEs under the Public Procurement Policy for MSEs formulated under the Micro, Small and Medium Enterprises Development Act, 2006 unless otherwise specified in the Tender document. Such MSEs shall produce documentary proof of registration as per provisions of the Policy i.e. registration with District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Industries Board (KVIB) or Coir Board or National Small Industries Commission (NSIC) or Directorate of Handicrafts and Handlooms or Udyog Aadhar Memorandum or any other body specified by Ministry of MSME.

14. As per the Rule 144 (xi) of General Financial Rules,2017, any bidder from a country which shares a land border with India will be eligible to bid in this tender, only if the bidder is registered with the

Competent Authority. Competent Authority for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).

15. Resolution of Disputes: Any dispute, disagreement or question arising out of or relating to or in consequence of the contract or to its fulfillment, or the validity of enforcement thereof which cannot be settled mutually, or the settlement of which is not herein specifically provided for, shall within 30 (thirty) days from the date either party informs the other in writing that such dispute or disagreement exists be referred to arbitration by the sole arbitrator. The Arbitrator shall be appointed as per the Indian Arbitration and Conciliation Act 1996 and proceedings will be conducted in Bangalore. The Arbitration proceedings shall be conducted in accordance with and subject to the Arbitration and Conciliation Act 1996 (Act 26 of 1996) as amended from time to time and the decision of the Arbitrator shall be final and binding on the parties thereto. Each party shall bear its own cost of preparing and presenting its case. The cost of Arbitration including the fees and expenses of the Arbitrator shall be shared equally by the parties unless the award provides otherwise. Subject to provisions of this clause, the courts at Bangalore shall have exclusive jurisdiction. Performance under this Contract shall, however continue during Arbitration proceeding and no payment due or payable by the parties hereto shall be withheld unless any such payment is/or forms a part of the subject matter of the Arbitration proceedings.

16. Force Majeure: Neither party shall bear responsibility for the complete or partial non-performance of any of his obligations if the non-performance results from such force majeure circumstances such as, but not restricted to, flood, fire, earthquake, civil commotion, sabotage, explosion, epidemic, quarantine restriction, strike, lock-out, freight embargo, acts of the Government, acts of public enemy and other acts of God as well as war or revolution, military operation, blockade, acts or actions of State authorities or any other circumstance beyond the control of the parties provided the other party is notified in writing within 21 days from the date of commencement of the unforeseeable event.

2. Local Content Declaration

1. DECLARATION OF LOCAL CONTENT

(To be given on company letter head with self certification - For tender value below Rs. 10 Crores

(To be given by Statutory Auditor or Cost Auditor or Cost Accountant or CA - For tender value above Rs. 10 Crores)

Date:

To,

Sub: Declaration of Local content

Tender Ref No:

Name of Tender:

1. Country of Origin of Goods being offered:

2. We hereby declare that items offered has -----% local content:

3. Details of Local Value additions:

4. Address At which Local value addition is being made:

"Local Content" means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

It is certified that the above mentioned Local content is excluding the following (a) (b) & (c):

- a. Imported items sourced locally from resellers/distributors are excluded from calculation of the above local content.
- b. The license fees/royalties paid/ technical charges paid out of India shall be excluded from local content calculation.
- c. Procurement/Supply of repackaged/refurbished/rebranded imported products as understood commonly shall be treated as reselling of imported products and shall be excluded from calculation of local content. The definition of repackaged /refurbished/rebranded imported products is as follows; Refurbishing means repair or reconditioning of an imported product does not amount to manufacture because no new goods come into existence. Repackaging means repacking of imported goods from bulk pack to smaller packs would not ordinarily amount to manufacture of a new item. Rebranding means relabeling or renaming or change in symbol or logo/makes or corporate image of a company/organization/ firm for an imported product would amount to rebranding.

It is certified that as per DPIITs OM Ref P-45021/102/2019-BE-II-Paart(1)(E-50310) Dtd. 04/03/2021 the local content mentioned above, by which we are Class-I local suppliers / Class-II local suppliers, does not contain services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC / value addition.

"False declaration will be in breach of Code of Integrity under Rule175(1)(i)(h)of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law."

Yours faithfully,

(Signature of the Bidder/OEM with Official seal)

C. Bid Templates

C.1 Technical Bid - Design, development, fabrication, welding, finishing and supply of light weight aluminum containers for storage and transportation of 390L & 650L Spacecraft propellant tanks

1. STORAGE CONTAINER

Design, development, fabrication, welding, finishing and supply of light weight aluminium containers for 650 L propellant tanks

Item specifications for STORAGE CONTAINER

Design, development, fabrication, welding, finishing and supply of light weight aluminium containers for 650 L propellant tanks

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Design, development, fabrication, welding, finishing and supply of light weight aluminum containers for storage and transportation of 390L & 650L Spacecraft propellant tanks as per the drawing and annexure. Price is inclusive of design, development of necessary tooling, procurement of Materials, fabrication and delivery at LPSC, Bangalore. No material shall be supplied by LPSC.	as per the scope of work	Yes / No / Explain		
2	Conceptual container drawings, quantities to be supplied and Applicable drawings	as per the drawing :PMSD-TF-SK-10-259	Yes / No / Explain		
3	Quantity	04 Nos	Yes / No / Explain		

4	Container drawings provided is conceptual. Party shall design the container as per scope, terms & conditions and submit drawings for approval as per the schedule given in section.7	As per section-7 of scope of work	Yes / No / Explain		
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5	Material of construction	<p>a)The material for aluminum container shall be scratch resistance aluminum (Al 5083) sheets with formed /rolled beads/ribs for stiffening.</p> <p>b)The structural frame work of the container shall be made of 25x25x2 mm thick aluminum square tube frame structure covered with 1.2 mm thick aluminum sheets outside and 0.8 mm thick aluminum sheets inside of the container. The outer aluminum sheet is formed to have profile like beads to strengthen the container.</p> <p>c)The inner wall of the container shall be fixed with poly urethane foam (PUF) having density of 50 kg/m³.</p> <p>d)Rubber beading shall be provided between the container and lid for preventing ingress of liquid/rain water and dust inside the container.</p> <p>e)The dimensions shown in the drawings are the final overall dimensions. Supplier shall provide necessary forming/fabrication allowances while making the container.</p> <p>f)Fabrication and forming shall be free from dents, holes, cracks and sharp edges.</p>	Yes / No / Explain		
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6	General design:	<p>a) Container shall be of low net weight, robust and dimensionally stable by providing all around beading (Ribs).</p> <p>b) Container shall be of corrosion resistance, dust proof, smooth and scratch resistance surface and splash proof.</p> <p>c) All around extremely stable profiles on the top rim of the container, bottom of the container and lid to ensure a durable container design.</p> <p>d) Container walls shall be reinforced with all round beadings (Ribs).</p> <p>e) The lids shall be provided with 2 nos. (Total 8 nos.) of toggle fasteners on all the four sides of the container.</p> <p>f) The container shall be provided with 2 nos. (Total 8 nos.) of stable foldable carry handle in each side.</p> <p>g) The container inner side wall shall be pasted with good quality high density (50 kg/m³) PUF of 50 mm thickness using durable resin.</p> <p>h) The inner side of the container both bottom and top shall be provided with 4 nos. (Total 8 nos.) of triangular corner edged 75 mm thick PUF pedals having tank profile to hold the propellant tank hemispheres without any movement (ensuring that both top and bottom ports and tubes are not loaded).</p> <p>i) The PUF pedals of 4 nos of each shall</p>	Yes / No / Explain		
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		<p>be pasted in the bottom top inner surface of the container in a position such a way that the PUF pedals makes a conical support to hold the tank in the lower hemisphere firmly. Suitable relief/ cut out in the PUF foam to be provided for the propellant port of tank</p> <p>j)Four nos of PUF pedals shall be pasted in the inner bottom side of the container such a way that it supports and keep the tank in position from bottom side with suitable relief/cutout for port tube.</p> <p>k)The bottom side of the container outside shall be provided with standard fork lift lifting channel provision.</p>			
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7	Fabrication:	<p>5.a. Design, development of tooling, fabrication and supply of Sample unit</p> <p>a)Supplier shall fabricate one no. of sample container of each type (total 2) as per the specification and offer to LPSCB for inspection and clearance. The bulk production of the container shall be taken up only after approval and clearance by LPSCB.</p> <p>b)Any deviations from the drawing should be intimated to LPSC for approval. Corrections, if any can be incorporated after mutual discussion and acceptance by LPSC.</p> <p>c)The Supplier shall carry out the design and development of necessary tooling for rolling/forming of aluminum sheets.</p> <p>d)The interconnection of formed aluminium sheets for container shall be TIG welding process and the welding shall be of good quality and free from weld defects such as cracks etc.</p> <p>e)The welded joints shall be subjected to Dye Penetrant test as per applicable procedure/standards .</p> <p>f)The riveted joints shall be based on the shear test conducted on specimens as per applicable standards.</p> <p>g)The toggle lock, foldable handle etc</p>	Yes / No / Explain		
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		shall be fixed to the container with riveting or by welding.			
8	Fabrication continued:	<p>5.b. Bulk production and supply of full supply</p> <p>a)The bulk production of the container shall be initiated only after inspection and clearance of the sample units by LPSCB as per section-6.1(a).</p> <p>b)Any changes and minor modifications shall be incorporated after mutual discussion and agreement.</p>	Yes / No / Explain		

9	Testing and Inspection:	<p>6.1 Testing: The sample container shall be subjected to the following tests as part of acceptance testing as per relevant applicable standards at their premises. Vendor shall provide test certificate for each of the following tests. All the required tools, equipments and accessories to be made by the supplier:</p> <ol style="list-style-type: none"> 1. Static load test . 2. Stacking test. 3. Carry test 4. Drop test 5. Splash test 6. Tensile test. <p>a) Supplier shall fabricate one no. of the sample container of each type and offer for inspection and clearance by LPSC, Bangalore. One-week advance intimation shall be provided to LPSCB for inspection and clearance. The inspection and clearance of sample containers shall be done at vendor's premises/factory by LPSCB Representatives.</p>	Yes / No / Explain		
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10	Delivery period:	a. The overall delivery schedule for supply of all containers shall be 7 months from date of P.O which includes one month for submission of fabrication drawing to LPSCB for approval and fabrication of sample containers (2 nos) within 2 months from date of drawing approval by LPSCB. And remaining 4 containers shall be supplied within 4 months from date of inspection and clearance of sample containers by LPSCB	Yes / No / Explain		
11	Weight	< 50 kg (Finished container)	Yes / No / Explain		
12	Delivery place:	a) The aluminum containers shall be delivered to LPSC, Bangalore.	Yes / No / Explain		
13	Documents to be submitted along with supply:	a) Test certificates as per section: 5a & 6.1 of scope of work. b) Material test certificate for PUF and aluminum sheets used for fabrication.	Yes / No / Explain		

14	General terms and conditions:	<p>a)The supplier shall provide the quotation for all the items as per tender specification and no split purchase order shall be considered.</p> <p>b)The supplier shall provide certificates for the tests carried out as per section-6 along with supply of material.</p> <p>c)The supplier shall provide compliance matrix covering all the specifications as per tender along with quotation.</p> <p>d)LPSC,Bangalore shall not supply any material and all the required material shall be procured by the supplier.</p> <p>e)Supplier has to submit the fabrication drawing as per the conceptual drawing provided LPSCB within one month of receipt of P.O as per section-7.</p> <p>f)Each container shall be provided with metallic name plate fixed on the outside wall of the container indicating the P.O details, S.No, Date of manufacturing, etc.</p> <p>g)The weight of the containers shall be optimized such a way that the final weight shall be less than 50 kg (Nominal).</p>	Yes / No / Explain		
15	Test requirement compliance	As per Annexure	Yes / No / Explain		
16	Warranty	12 months	Yes / No / Explain		
17	Standards	MIL-STD-810G/ JSS-0253-01	Yes / No / Explain		

Document : Scope of work

2. Transportation container

Design, development, fabrication, welding, finishing and supply of light weight aluminium containers for 390 L propellant tanks

Item specifications for Transportation container

Design, development, fabrication, welding, finishing and supply of light weight aluminium containers for 390 L propellant tanks

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Scope	Design, development, fabrication, welding, finishing and supply of light weight aluminum containers for storage and transportation of 390L Spacecraft propellant tanks as per the drawing and annexure. Price is inclusive of design, development of necessary tooling, procurement of Materials, fabrication and delivery at LPSC, Bangalore. No material shall be supplied by LPSC.	Yes / No / Explain		
2	Conceptual container drawings,	Aluminum container for 390L propellant tanks-PMSC-TF-SK-10-260	Yes / No / Explain		
3	Quantity	02 Nos	Yes / No / Explain		
4	Container drawings provided is conceptual. Party shall design the container as per scope, terms & conditions and submit drawings for approval as per the schedule given in section.7	As per scope of work	Yes / No / Explain		

5	Material of construction[MOC]	<p>a)The material for aluminum container shall be scratch resistance aluminum (Al 5083) sheets with formed /rolled beads/ribs for stiffening.</p> <p>b)The structural frame work of the container shall be made of 25x25x2 mm thick aluminum square tube frame structure covered with 1.2 mm thick aluminum sheets outside and 0.8 mm thick aluminum sheets inside of the container. The outer aluminum sheet is formed to have profile like beads to strengthen the container.</p> <p>c)The inner wall of the container shall be fixed with poly urethane foam (PUF) having density of 50 kg/m³.</p> <p>d)Rubber beading shall be provided between the container and lid for preventing ingress of liquid/rain water and dust inside the container.</p> <p>e)The dimensions shown in the drawings are the final overall dimensions. Supplier shall provide necessary forming/fabrication allowances while making the container.</p> <p>f)Fabrication and forming shall be free from dents, holes, cracks and sharp edges.</p>	Yes / No / Explain		
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6	General design:	<p>a) Container shall be of low net weight, robust and dimensionally stable by providing all around beading (Ribs).</p> <p>b) Container shall be of corrosion resistance, dust proof, smooth and scratch resistance surface and splash proof.</p> <p>c) All around extremely stable profiles on the top rim of the container, bottom of the container and lid to ensure a durable container design.</p> <p>d) Container walls shall be reinforced with all round beadings (Ribs).</p> <p>e) The lids shall be provided with 2 nos. (Total 8 nos.) of toggle fasteners on all the four sides of the container.</p> <p>f) The container shall be provided with 2 nos. (Total 8 nos.) of stable foldable carry handle in each side.</p> <p>g) The container inner side wall shall be pasted with good quality high density (50 kg/m³) PUF of 50 mm thickness using durable resin.</p> <p>h) The inner side of the container both bottom and top shall be provided with 4 nos. (Total 8 nos.) of triangular corner edged 75 mm thick PUF pedals having tank profile to hold the propellant tank hemispheres without any movement (ensuring that both top and bottom ports and tubes are not loaded).</p> <p>i) The PUF pedals of 4 nos of each shall</p>	Yes / No / Explain		
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		<p>be pasted in the bottom top inner surface of the container in a position such a way that the PUF pedals makes a conical support to hold the tank in the lower hemisphere firmly. Suitable relief/ cut out in the PUF foam to be provided for the propellant port of tank</p> <p>j)Four nos of PUF pedals shall be pasted in the inner bottom side of the container such a way that it supports and keep the tank in position from bottom side with suitable relief/cutout for port tube.</p> <p>k)The bottom side of the container outside shall be provided with standard fork lift lifting channel provision.</p>			
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7	<p>5.Fabrication: 5.a. Design, development of tooling, fabrication and supply of Sample unit</p>	<p>a)Supplier shall fabricate one no. of sample container of each type (total 2) as per the specification and offer to LPSCB for inspection and clearance. The bulk production of the container shall be taken up only after approval and clearance by LPSCB.</p> <p>b)Any deviations from the drawing should be intimated to LPSC for approval. Corrections, if any can be incorporated after mutual discussion and acceptance by LPSC.</p> <p>c)The Supplier shall carry out the design and development of necessary tooling for rolling/forming of aluminum sheets.</p> <p>d)The interconnection of formed aluminium sheets for container shall be TIG welding process and the welding shall be of good quality and free from weld defects such as cracks etc.</p> <p>e)The welded joints shall be subjected to Dye Penetrant test as per applicable procedure/standards .</p> <p>f)The riveted joints shall be based on the shear test conducted on specimens as per applicable standards.</p> <p>g)The toggle lock, foldable handle etc shall be fixed to the container with riveting or by welding.</p>	Yes / No / Explain		
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8	5.b. Bulk production and supply of full supply	<p>a)The bulk production of the container shall be initiated only after inspection and clearance of the sample units by LPSCB as per section-6.1(a).</p> <p>b)Any changes and minor modifications shall be incorporated after mutual discussion and agreement.</p>	Yes / No / Explain		
9	6.Testing and Inspection: 6.1Testing:	<p>The sample container shall be subjected to the following tests as part of acceptance testing as per relevant applicable standards at their premises. Vendor shall provide test certificate for each of the following tests. All the required tools, equipments and accessories to be made by the supplier:</p> <ol style="list-style-type: none"> 1. Static load test . 2. Stacking test. 3. Carry test 4. Drop test 5. Splash test 6. Tensile test. 	Yes / No / Explain		
10	6.2 Inspection	<p>a)Supplier shall fabricate one no. of the sample container of each type and offer for inspection and clearance by LPSC,Bangalore. One-week advance intimation shall be provided to LPSCB for inspection and clearance. The inspection and clearance of sample containers shall be done at vendor's premises/factory by LPSCB Representatives</p>	Yes / No / Explain		

11	Delivery period:	a.The overall delivery schedule for supply of all containers shall be 7 months from date of P.O which includes one month for submission of fabrication drawing to LPSCB for approval and fabrication of sample containers (2 nos) within 2 months from date of drawing approval by LPSCB. And remaining 4 containers shall be supplied within 4 months from date of inspection and clearance of sample containers by LPSCB	Yes / No / Explain		
12	Delivery place:	a)The aluminum containers shall be delivered to LPSC, Bangalore.	Yes / No / Explain		
13	Documents to be submitted along with supply:	a) Test certificates as per section: 5a & 6.1. of scope of work b) Material test certificate for PUF and aluminum sheets used for fabrication.	Yes / No / Explain		
14	Warranty:	a)The supplier shall provide a standard warranty of one year for the container from the date of acceptance of the containers for any manufacturing defects.	Yes / No / Explain		

15	General terms and conditions:	<p>a)The supplier shall provide the quotation for all the items as per tender specification and no split purchase order shall be considered.</p> <p>b)The supplier shall provide certificates for the tests carried out as per section-6 along with supply of material.</p> <p>c)The supplier shall provide compliance matrix covering all the specifications as per tender along with quotation.</p> <p>d)LPSC,Bangalore shall not supply any material and all the required material shall be procured by the supplier.</p> <p>e)Supplier has to submit the fabrication drawing as per the conceptual drawing provided LPSCB within one month of receipt of P.O as per section-7.</p> <p>f)Each container shall be provided with metallic name plate fixed on the outside wall of the container indicating the P.O details, S.No, Date of manufacturing, etc.</p> <p>g)The weight of the containers shall be optimized such a way that the final weight shall be less than 50 kg (Nominal).</p>	Yes / No / Explain		
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Document : scope of work

Common Specifications (Applicable for all items)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
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1	Design, development, fabrication, welding, finishing and supply of light weight aluminum containers for storage and transportation of 390L & 650L Spacecraft propellant tanks as per the drawing and annexure. Price is inclusive of design, development of necessary tooling, procurement of Materials, fabrication and delivery at LPSC, Bangalore. No material shall be supplied by LPSC.	As per scope of work	Yes / No / Explain		
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Supporting Documents required from Vendor

1. as per scope of work

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	As per scope of work	Yes / No / Explain	
2	THIS IS A TWO PART TENDER : DO NOT MENTION THE PRICE ELEMENT IN TECHNO COMMERCIAL BID. IF ANY PRICE ELEMENT MENTIONED IN THE TECHNICAL BID, YOUR OFFER WILL NOT BE CONSIDERED.	Yes / No / Explain	
3	Goods and Services Tax (GST): Kindly mention percentage of GST considered in your offer along with HSN Code.	-	
4	Delivery Terms: FOR LPSC, Bangalore.	Yes / No / Explain	
5	Delivery Period: a. The overall delivery schedule for supply of all containers shall be 7 months from date of P.O which includes one month for submission of fabrication drawing to LPSCB for approval and fabrication of sample containers (2 nos) within 2 months from date of drawing approval by LPSCB. And remaining 4 containers shall be supplied within 4 months from date of inspection and clearance of sample containers by LPSCB.	Yes / No / Explain	
6	Payment Terms: 100% payment shall be made within 30 days of receipt and acceptance of the items at our site.	Yes / No / Explain	
7	Liquidated Damages (LD): If the ordered items are not supplied within the delivery schedule, LD shall be levied from your bill @ 0.5% of the order value per week or 0.5% of the value of the stores for which the delivery is delayed for each week of delay subject to a maximum of 5% of the order value. However, in case of inordinate delay in completion period, LD @ 10% shall be recovered.	Yes / No / Explain	
8	Warranty: The items shall be warranted for a minimum period of 12 months from the date of supply or acceptance of items at our site which ever is later. Necessary warranty certificate shall be furnished along with the supply.	Yes / No / Explain	

9	Performance Bank Guarantee (PBG): You have to submit PBG towards fulfilment of warranty obligations and performance of the system for 3% of the Order Value from a Nationalized / Scheduled Bank on non-judicial stamp paper of appropriate value valid till the completion of warranty period plus 60 days as per the format provided by Department.	Yes / No / Explain	
10	Insurance: Being a Government of India Department, Insurance is not required at our cost. Please ensure the safe delivery of the ordered item with proper AIR / SEA / ROAD worthy packing.	Yes / No / Explain	
11	Free Issue Material (FIM), if applicable: You have to submit Bank Guarantee for a value equivalent to FIM (if applicable) from a Nationalized / Scheduled Bank on non-judicial stamp paper of appropriate value towards issue of FIM. The BG shall be valid till receipt and acceptance of supply and satisfactory accounting of FIM.	Yes / No / Explain	
12	Address, contact details like Telephone Number, e-mail, etc. on which order to be placed.	Yes / No / Explain	
13	Details of Principal: Address, contact details like Telephone Number, e-mail, etc. (if applicable)	Yes / No / Explain	
14	Bank Details: Bank name, Branch address, Account No., IFSC Code, IBAN Number, SWIFT, etc.	Yes / No / Explain	
15	Local Content (%): Please mention the percentage of Local Content and the location where local value addition takes place (Kindly enclose self-certification document in the prescribed format)	Yes / No / Explain	
16	MSE Status: Kindly mention the classification under MSE and submit supporting documentation (if applicable)	Yes / No / Explain	
17	Validity of offer: 120 days from the date of opening of tender or as specified in the Tender Document.	Yes / No / Explain	
18	Any other terms	-	

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
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1	STORAGE CONTAINER Design, development, fabrication, welding, finishing and supply of light weight aluminium containers for 650 L propellant tanks	4.00 Nos.		-		
2	Transportatio n container Design, development, fabrication, welding, finishing and supply of light weight aluminium containers for 390 L propellant tanks	2.00 Nos.		-		

Common charges (Applicable for all items)

P & F Charges	
Freight if any (Value)	
Installation & Configuration	
Other Costs, if any (Value)	
Taxes, if any (Percentage)	

Annexure to the indent for supply of light weight aluminum storage and transportation containers for 390 & 650 L Propellant tanks.

1. Scope

Design, development, fabrication, welding, finishing and supply of light weight aluminum containers for storage and transportation of 390L & 650L Spacecraft propellant tanks as per the drawing and annexure. Price is inclusive of design, development of necessary tooling, procurement of Materials, fabrication and delivery at LPSC, Bangalore. No material shall be supplied by LPSC.

2. Conceptual container drawings, quantities to be supplied and Applicable drawings:

S.No	Description	Drawing No	Quantity (No)
01	Aluminum container for 650L propellant tanks	PMSD-TF-SK-10-259	04
02	Aluminum container for 390L propellant tanks	PMSD-TF-SK-10-260	02
03	390L Propellant tank drawing	sketch	NA
04	650L Propellant tank drawing	sketch	NA
Note: Container drawings provided is conceptual. Party shall design the container as per scope, terms & conditions and submit drawings for approval as per the schedule given in section.7			

3. Material of construction[MOC]:

- The material for aluminum container shall be scratch resistance aluminum (Al 5083) sheets with formed /rolled beads/ribs for stiffening.
- The structural frame work of the container shall be made of 25x25x2 mm thick aluminum square tube frame structure covered with 1.2 mm thick aluminum sheets outside and 0.8 mm thick aluminum sheets inside of the container. The outer aluminum sheet is formed to have profile like beads to strengthen the container.
- The inner wall of the container shall be fixed with poly urethane foam (PUF) having density of 50 kg/m³.
- Rubber beading shall be provided between the container and lid for preventing ingress of liquid/rain water and dust inside the container.
- The dimensions shown in the drawings are the final overall dimensions. Supplier shall provide necessary forming/fabrication allowances while making the container.
- Fabrication and forming shall be free from dents, holes, cracks and sharp edges.

4. General design:

- Container shall be of low net weight, robust and dimensionally stable by providing all around beading (Ribs).
- Container shall be of corrosion resistance, dust proof, smooth and scratch resistance surface and splash proof.
- All around extremely stable profiles on the top rim of the container, bottom of the container and lid to ensure a durable container design.
- Container walls shall be reinforced with all round beadings (Ribs).

- e) The lids shall be provided with 2 nos. (Total 8 nos.) of toggle fasteners on all the four sides of the container.
- f) The container shall be provided with 2 nos. (Total 8 nos.) of stable foldable carry handle in each side.
- g) The container inner side wall shall be pasted with good quality high density (50 kg/m³) PUF of 50 mm thickness using durable resin.
- h) The inner side of the container both bottom and top shall be provided with 4 nos. (Total 8 nos.) of triangular corner edged 75 mm thick PUF pedals having tank profile to hold the propellant tank hemispheres without any movement (ensuring that both top and bottom ports and tubes are not loaded).
- i) The PUF pedals of 4 nos of each shall be pasted in the bottom top inner surface of the container in a position such a way that the PUF pedals makes a conical support to hold the tank in the lower hemisphere firmly. Suitable relief/ cut out in the PUF foam to be provided for the propellant port of tank
- j) Four nos of PUF pedals shall be pasted in the inner bottom side of the container such a way that it supports and keep the tank in position from bottom side with suitable relief/cutout for port tube.
- k) The bottom side of the container outside shall be provided with standard fork lift lifting channel provision.

5. Fabrication:

5.a. Design, development of tooling, fabrication and supply of Sample unit

- a) Supplier shall fabricate one no. of sample container of each type (total 2) as per the specification and offer to LPSCB for inspection and clearance. The bulk production of the container shall be taken up only after approval and clearance by LPSCB.
- b) Any deviations from the drawing should be intimated to LPSC for approval. Corrections, if any can be incorporated after mutual discussion and acceptance by LPSC.
- c) The Supplier shall carry out the design and development of necessary tooling for rolling/forming of aluminum sheets.
- d) The interconnection of formed aluminium sheets for container shall be TIG welding process and the welding shall be of good quality and free from weld defects such as cracks etc.
- e) The welded joints shall be subjected to Dye Penetrant test as per applicable procedure/standards.
- f) The riveted joints shall be based on the shear test conducted on specimens as per applicable standards.
- g) The toggle lock, foldable handle etc shall be fixed to the container with riveting or by welding.

5.b. Bulk production and supply of full supply

- a) The bulk production of the container shall be initiated only after inspection and clearance of the sample units by LPSCB as per section-6.1(a).
- b) Any changes and minor modifications shall be incorporated after mutual discussion and agreement.

6. Testing and Inspection:

6.1 Testing:

The sample container shall be subjected to the following tests as part of acceptance testing as per relevant applicable standards at their premises. Vendor shall provide test certificate for each of the following tests. All the required tools, equipments and accessories to be made by the supplier:

1. Static load test .
2. Stacking test.
3. Carry test
4. Drop test
5. Splash test
6. Tensile test.

- a) Supplier shall fabricate one no. of the sample container of each type and offer for inspection and clearance by LPSCB, Bangalore. One-week advance intimation shall be provided to LPSCB for inspection and clearance. The inspection and clearance of sample containers shall be done at vendor's premises/factory by LPSCB Representatives.

7. Delivery period:

- a. The overall delivery schedule for supply of all containers shall be 7 months from date of P.O which includes one month for submission of fabrication drawing to LPSCB for approval and fabrication of sample containers (2 nos) within 2 months from date of drawing approval by LPSCB. And remaining 4 containers shall be supplied within 4 months from date of inspection and clearance of sample containers by LPSCB as given below:

S.No	Time schedule	Delivery Detail
01	T0	Placement of P.O
02	T0+1 Month	Submission of drawings to LPSCB for approval and clearance.
03	T0+1+2 months	Realization of 2 nos of sample container (Each type 1 no) and inspection & clearance by LPSCB for bulk production.
04	T0+1+2+4 months	Supply of balance qty of 4 containers as per P.O.

8. Delivery place:

- a) The aluminum containers shall be delivered to LPSC, Bangalore.

9. Documents to be submitted along with supply:

- a) Test certificates as per section: 5a & 6.1.

- b) Material test certificate for PUF and aluminum sheets used for fabrication.

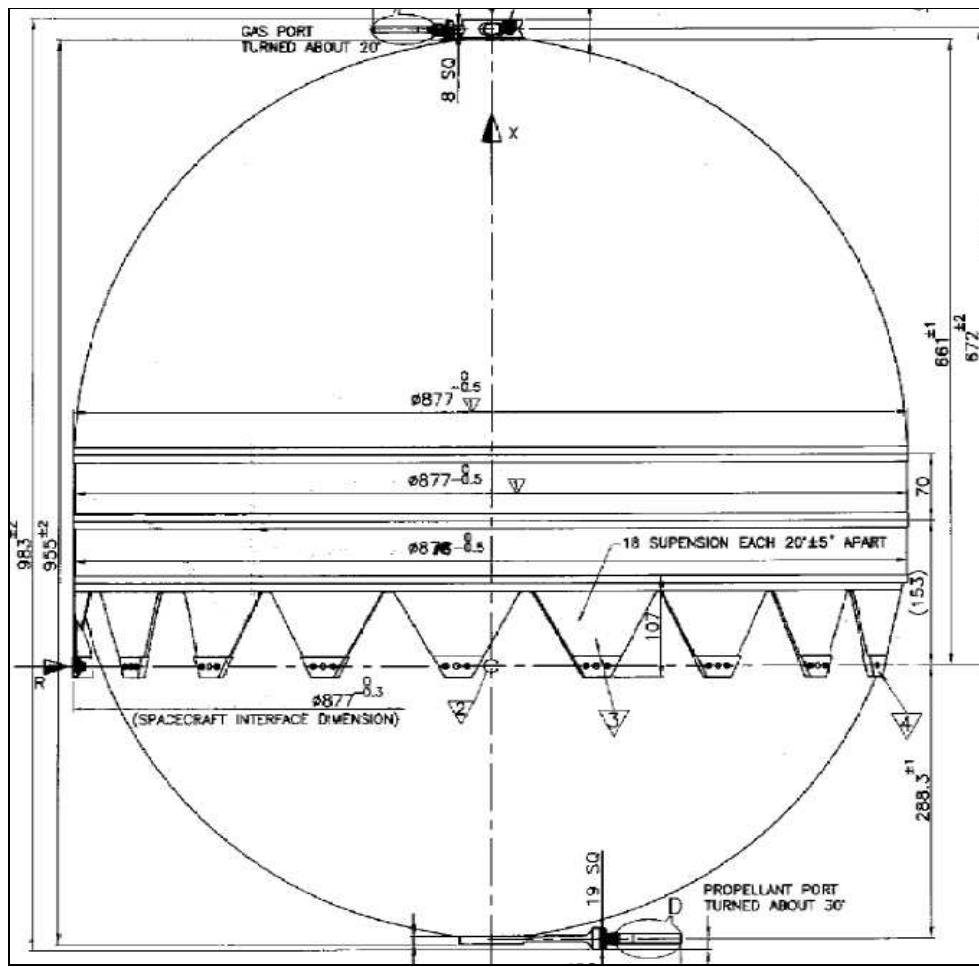
10. Warranty:

- a) The supplier shall provide a standard warranty of one year for the container from the date of acceptance of the containers for any manufacturing defects.

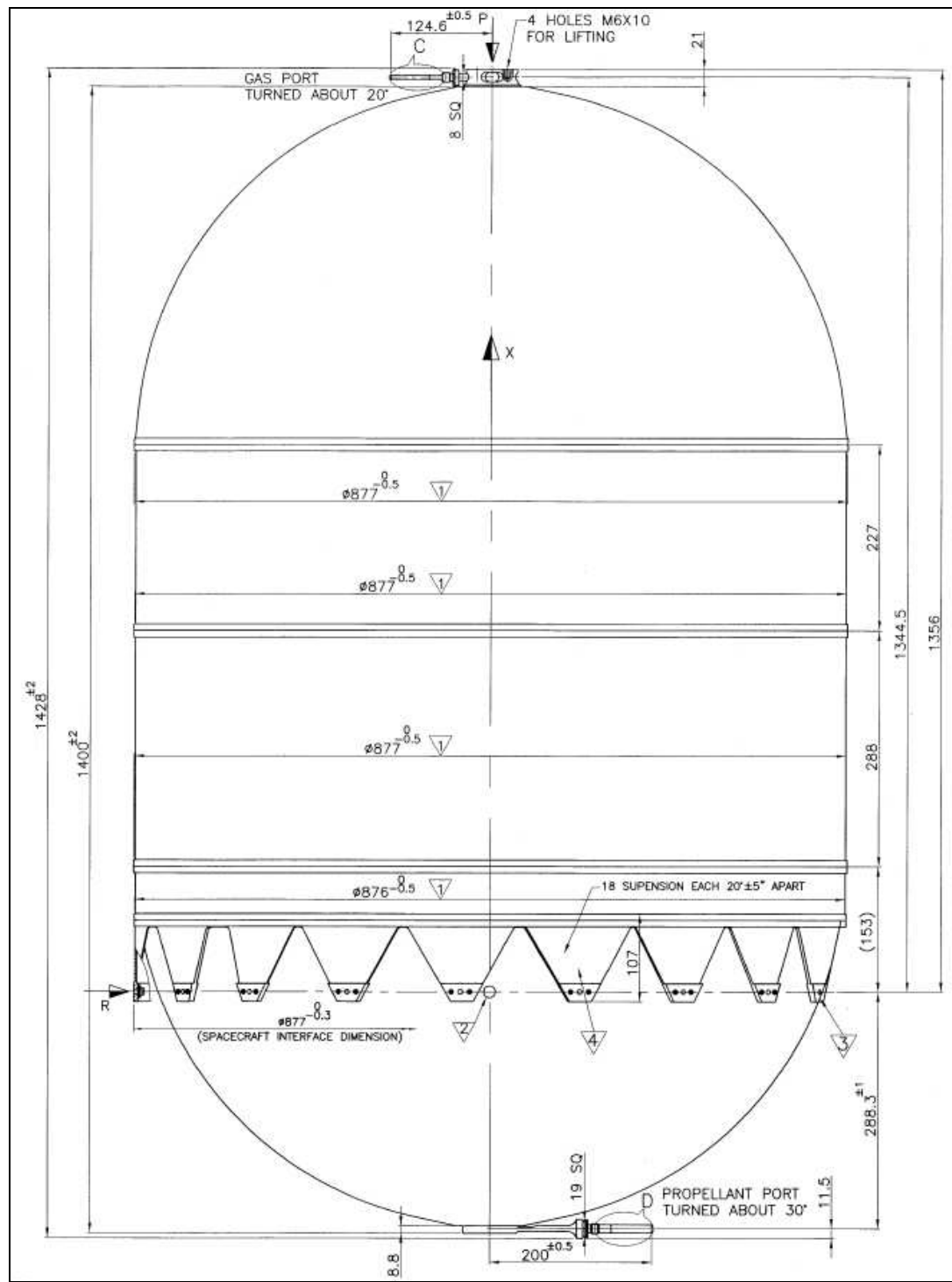
11. General terms and conditions:

- a) The supplier shall provide the quotation for all the items as per tender specification and no split purchase order shall be considered.
- b) The supplier shall provide certificates for the tests carried out as per section-6 along with supply of material.
- c) The supplier shall provide compliance matrix covering all the specifications as per tender along with quotation.
- d) LPSC,Bangalore shall not supply any material and all the required material shall be procured by the supplier.
- e) Supplier has to submit the fabrication drawing as per the conceptual drawing provided LPSCB within one month of receipt of P.O as per section-7.
- f) Each container shall be provided with metallic name plate fixed on the outside wall of the container indicating the P.O details, S.No, Date of manufacturing, etc.
- g) The weight of the containers shall be optimized such a way that the final weight shall be less than 50 kg (Nominal).

PROPELLANT TANK OVERALL VIEW (ONLY FOR INFORMATION)

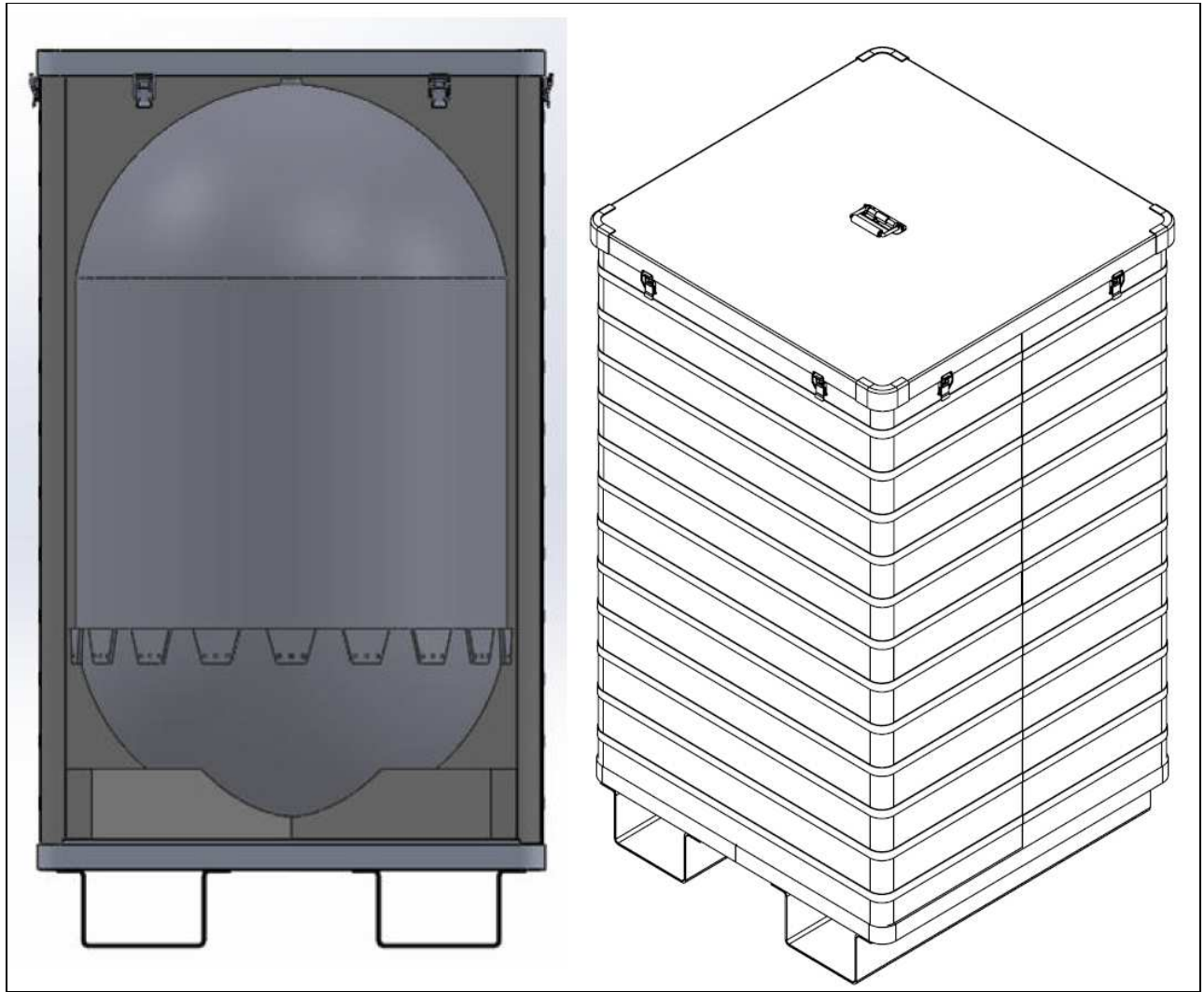


390L Propellant tank



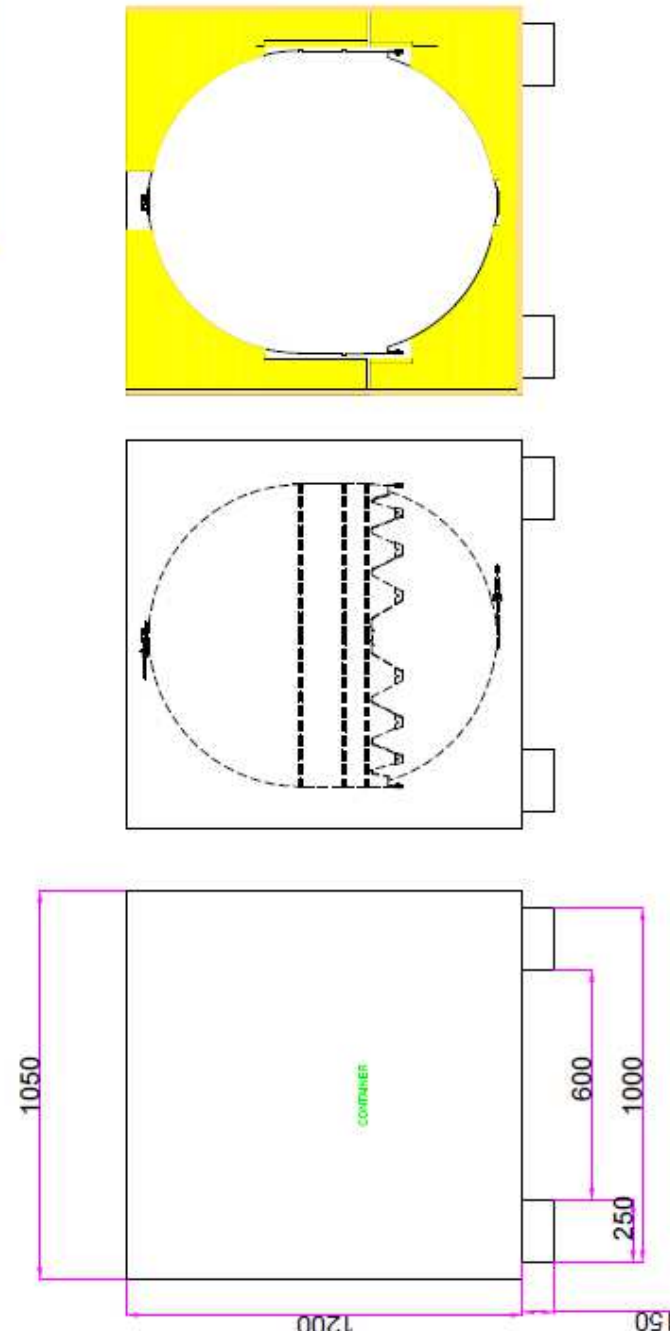
650L Propellant tank

Light weight aluminum container configuration:
General conceptual configuration for light weight aluminum storage containers



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Aluminum container for 650L propellant tanks-(Conceptual drawing-PMSD-SK-10-260)

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DATE		DATE		DATE		DATE	
NOTES:-							
							
PART NO.		DESCRIPTION		MATERIAL		QTY.	
DO NOT SCALE THE DRAWING DIMENSIONS ARE IN MILLIMETERS REMOVE SHARP EDGES & BURRS		ALUMINUM CONTAINER FOR 650L TANK		STOCK SIZE		REMARKS	
PROJECT		TEST FACILITY		GOVERNMENT OF INDIA-DEPARTMENT OF SPACE		PROJECTION	
DESIGNED		TM		INDIAN SPACE RESEARCH ORGANISATION		SHEET	
DRAWN		TM		LIQUID PROPELLION SYSTEMS CENTRE		OF	
DRG. CHD		NMR		BANGALORE - INDIA		XXX	
APPROVED		NMR		SCALE		XXX	
DATE		DATE		DATE		DATE	
REV		ZONE		DESCRIPTION		DATE	
REV		ZONE		DESCRIPTION		DATE	