**ANNEXURE –A**

1. The following points need to be included in the tender documents as basic requirements.
	1. Technical competency of the firms will be evaluated according to their experience in Titanium product fabrication including machining, turning and welding and should have proven track record.
	2. Bidders should also provide proof (Work completion certificate) of executing similar works earlier.
	3. Detailed plan to be submitted within one week from the placement of order. The successful bidder should present the same at KEC with Pert chart including the micro level activities within 10 days from the placement of order.
	4. If any item in the BOQ required to be procured additionally during the PO execution period, supplier need to maintain the same rate for all items.
	5. All testing charges, Test fixtures or setup required if any and slot arrangements of test facilities are under the scope of supplier.
	6. Point wise compliance to scope of supply and test requirements, material, finish and compliance to each list of deliverables are also need to be submitted on T-bid.
	7. BOQ should be made as item wise costing for each serial Nos.
	8. Delivery schedule is inclusive of all testing and inspection timeline. A LoI will be released after selection of successful bidder to meet the urgent schedule.
2. The delivery timeline is within 6 months from the date of purchase order

**ANNEXURE – B**

**SCOPE OF SUPPLY**

1. All material certificates including chemical and mechanical test reports (for each batch/lot), finish reports, Dye penetration test report, radiography test report as per ASTM standards and certificates from NABL accredited lab (where ever applicable) are to be provided along with the supply.
2. TIG welding has to be carried out for welding of different parts to assemble.
3. Welder qualification report (WPS & PQR) has to be provided. The same is to be approved by ASNT/ISNT Level II engineer or higher.
4. Internal Pneumatic (medium of Argon Gas) test have to be carried out for the pressure of 4.0 kg/cm2and immersed for 60 minutes in a water tank filled with fresh water for air bubble check. There should not be any air bubbles for the acceptance of Cylinder assembly.
5. For the items which are not manufactured in India, the following documents are to be submitted by the supplier.

a). Air way bills, b). Bill of entry c). OEM CoCs, d) Test reports, e). Invoice f). Purchase order copy g). Datasheets.

1. For the items which are manufactured in India must have OEM CoCs, purchase order, test reports, invoice and datasheets to be supplied along with all purchased items.
2. Material testing charges, all inspection charges and sample to be borne by the supplier (Manufacturer).
3. Inspection and test plan are placed at Annexure-D.
4. For KELTRON Hold points, inspection call letter to be forwarded at least one week advance for deputing respective personnel.
5. All technical clarification to be sought from SPG, D&D, KELTRON EQUIPMENT COMPLEX, Karakulam, Trivandrum.
6. Supplier has to supply items as per given drawing.
7. Delivery Schedule has to be strictly followed.
8. Note: - The design variation of 10-15% is anticipated.
9. Following stage wise inspection to be notified to KELTRON
10. Stage 1 - Raw Material inspection
11. Stage 2 - After completion of machined components
12. Stage 3 - After welding process completion
13. Stage 4 - Final inspection.
14. The cylinder assembly to with stand 600 bar pressure test. Pressure test under Keltron Scope. Vendor to provide necessary support for the same.

**ANNEXURE –C**

 **SCOPE OF SUPPLY**

1. All raw materials to be procured by the supplier. The supplier has to follow the mandatory procedures mentioned at the last part of this scope of supply, before conducting material testing. All material test certificates including chemical and mechanical from NABL accredited lab are to be provided along with the supply.
2. All items to be supplied with “FINISH” as per the drawings attached.
3. All dimensions are critical. All Items must be free from pit marks, scratches, burr and/or other manufacturing defects.
4. Material testing charges (Lab charges) and sample costs are to be borne by the supplier.
5. After Fabrication of items, vendor’s internal inspection report and inspection call letter to be forwarded at least one week advance to KELTRON, for deputing person for inspection. All dimensions check reports & Material test certificates from NABL accredited lab are to be provided along with the inspection call letter.
6. All items to be inspected and accepted by KELTRON SPG QA prior to finishing process.
7. Ultra sound test to be conducted on Raw material.

**PROCEDURE FOR MATERIAL TESTING**

1. The samples of all raw materials used for fabricating the mechanical items are to be forwarded to KELTRON SPG QA department before conducting the material/ chemical test at NABL Lab.
2. QA will return the samples after the verification and sealing.
3. Sealed samples may contain serial number/ traceable number that must be furnished in the material certificates.
4. The material certificate shall contain QA traceable number /serial number and ink signed signature with seal of NABL Lab
5. Raw material tests are to be carried out for both Mechanical and Chemical properties. LAB reports must contain standard and observed values of the samples along with **material** **grade** confirmation.
6. Tested material samples to be submitted back to SPG KELTRON along with the reports.