

Scope of Work and Other Terms & conditions

The scope of work is to realize and supply the following CE20 Containers as listed in table 1 –

Table-1

SI No	Description	Drawing No	Qty (Nos)
1	LOX Pump Inducer Casing Assembly	CE20-1100-10AY	2
2	LOX Pump Volute Assembly	CE20-1100-20AY	2
3	LOX Pump Bearing Housing Assembly	CE20-1100-30AY	2
4	LOX Pump Impeller Assembly	CE20-1100-40AY	2
5	LOX Pump Seal Housing Assembly	CE20-1100-50AY	2
6	LOX Turbine Housing Assembly	CE20-1100-70AY	2
7	LOX Turbine Rotor Assembly	CE20-1100-80AY	2
8	LOX Turbine Exhaust Casing	CE20-1100-91	2
9	LOX Pump Inducer	CE20-1100-113	2
10	Floating Ring (front)	CE20-1100-114	2
11	Floating Ring Nut (F)	CE20-1100-115	2
12	Floating Ring (rear)	CE20-1100-116	2
13	Floating Ring Nut (R)	CE20-1100-117	2
14	Hot Gas Seal Support	CE20-1100-126	2
15	LOX Turbine stator	CE20-1100-129	2
1	LH2 Pump Inducer Casing Assembly	CE20-1200-10AY	2
2	LH2 Pump First Stage Volute Assembly	CE20-1200-20AY	2
3	LH2 Pump First Stage Impeller Assembly	CE20-1200-30AY	2
4	LH2 Pump First Stage Impeller Body	CE20-1200-31	2
5	LH2 Pump First Stage Impeller Cover	CE20-1200-32	2
6	LH2 Pump Interstage Housing Assembly	CE20-1200-40AY	2
7	LH2 Pump Second Stage Volute Assembly	CE20-1200-50AY	2
8	LH2 Pump Second Stage Impeller Assembly	CE20-1200-60AY	2
9	LH2 Pump Second Stage Impeller Body	CE20-1200-61	2
10	LH2 Pump Second Stage Impeller Cover	CE20-1200-62	2
11	LH2 Intermediate Pipe Assembly	CE20-1200-70AY	2
12	LH2 Turbine First Rotor Assembly	CE20-1200-80AY	2
13	LH2 Turbine Housing Assembly	CE20-1200-110AY	2
14	LH2 First Stage Seal Assembly	CE20-1200-130AY	2
15	LH2 Second Stage Seal Assembly -1	CE20-1200-140AY	2
16	LH2 Second Stage Seal Assembly -2	CE20-1200-150AY	2
17	LH2 Turbine Exhaust Casing	CE20-1200-121	2
18	LH2 Pump Inducer	CE20-1200-223	2
19	Inner Orifice Balance Position	CE20-1200-227	2
20	LH2 Turbine Stator	CE20-1200-232	2
21	LH2 Turbine Second Rotor	CE20-1200-233	2

Terms & conditions:

1. It may be noted that process / procedure followed for the realization of CE20 TP transportation and storage container vide TM64 20190338420101 dtd 10.11.2020 shall be followed for the current scope also. Party shall utilize expertise gained from the above referred PO while executing the present scope.
2. Containers shall be made with Roto moulded Poly ethylene material as exterior construction. Hardware seating area at inside the container cavity shall be moulded with cross linked polyethylene (XLPE) (black/grey in color). The foam shall be glued inside the box firmly.
3. The containers shall have EPDM (Ethylene Propylene Diene Monomer) rubber gaskets for prevention of water ingress. Party shall supply these gaskets for replacement during the service life of containers in case of need as spare.
4. Adequate small latches, hinges & handles shall be provided for safety and easy handling of the container. All the latches, hinges, handles & other metallic components used in the containers shall be coated to protect the same from corrosion.
5. The containers shall be water proof and shall withstand environmental conditions such as high humidity, saline atmosphere etc.
6. Top of the containers shall be open at least by 95° to ensure the safe removal of the assemblies from the containers and suitable arrester shall be provided to hold the lid at the open condition.
7. The color of the containers shall be blue and legends shall be printed on the containers for identification of the container of each variant. Other safety legends shall also be provided.
8. The containers shall have identification numbers / markings by screen printing. Additionally as these boxes are planned for Gaganyaan application, "GAGANYAAN" marking shall be done on the boxes.
9. Any minor reworks required on containers due to fitment issue after delivery shall be carried out by the party without any extra cost.
10. The following inspections / acceptance tests shall be performed by the party on the containers. The containers realized shall be in conformance with MIL-810G / JSS-0253-01 standard.
 - On all containers
 - A. Dimensional inspection internal cavity
 - B. Rain test (as per JSS-0253-01)
 - On four numbers of container selected at random
 - C. Static load test (as per JSG-0102)
 - D. Drop test from ~ 120 cm height
 - E. Lift test (as per JSS-0253-01)
 - F. High temp test at around 65 °C
11. The containers shall have a life of minimum 10 years

Responsibilities of LPSC

1. Approval of design/drawings submitted by the party
2. Pre delivery counter- inspection & participation in tests shall be carried out by LPSC representatives at LPSC's discretion at the fabricator' site

Delivery Schedule for Supply of containers

1. Supply of one set of container drawings for review and approval by LPSC (T*) – T + 10 days
2. Delivery schedule for containers - T** + 3 months
Where T – Date of placement of PO
T** - LPSC clearance on approval of drawings

Place of supply

1. Containers shall be properly packed & to be delivered to the LPSC, Valiamala
2. Applicable packing & forwarding , Transportation charges shall be mentioned separately in the offer by the party.

Acceptance & Warranty

1. Final acceptance will be subject to inspection at manufacturer's site.
2. Party shall provide acceptance test certificate (indicating the details of tests performed as mentioned in Sr.no 10) & dimensional inspection reports for all containers during the inspection at site for necessary clearance.
3. Items shall be warranted for a period 12 months against manufacturing defects or bad workmanship from the date of acceptance of the items at LPSC. Warranty certificate duly signed & stamped by the party shall be furnished.

Taxes & Duties

1. Party shall mention applicable GST rates separately in their offer.