SPECIFICATION OF FLANGE AND THE ASSEMBLY

A) **GEOMETRY** (Refer Figure-1)

4 Flanges have to be made as per the drawing.

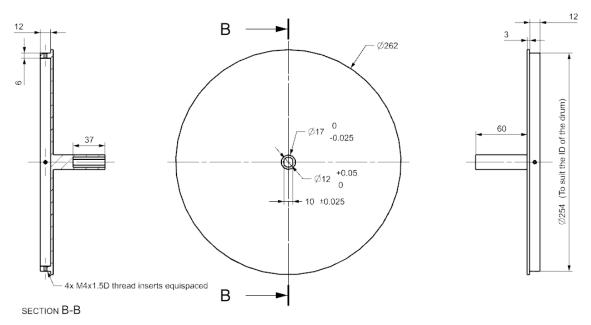


Figure-1 Flange

B) MATERIAL

SS304/Ti6Al4V

C)Assembly of the flange with Drum

Each drum has to be bonded with a flange on either end of the drum as per the drawing supplied (figure 2).

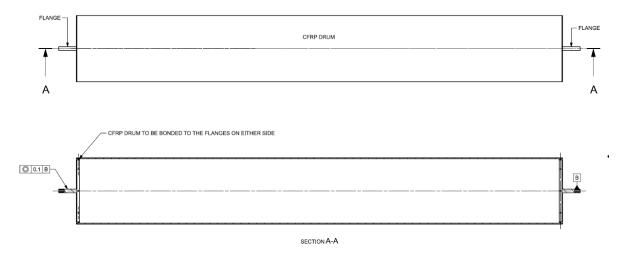


Figure-2 Assembly drawing of the CFRP drum with flanges.

D) Bonding material

Bonding material details including strength details to be provided. Suitable epoxy based adhesive with a min lap shear strength of 18 MPa to be used

E) QUALITY ASSURANCE PROVISIONS

- 1. Certificates for the Adhesive used to bond the flange with drum be provided at the time of quotation.
- 2. Log sheets for cure cycle, temperature and pressure used for curing to be provided.
- 3. Strength test on a co-cured coupon to be carried out and strength of the bond to be submitted at the time of delivery
- 4. Flanges have to be aligned as per the drawing at the time of assembly and should be indicated in the inspection report.
- 6. Certificate giving physical and mechanical properties of the Flange material to be provided at the time of delivery.
- 7. Chemical composition certificate of the flange material to be provided at the time of delivery.

G) PACKAGING AND SHIPPING

- I. The batch number, serial number of the drums should be clearly labeled on each drum assembly.
- II. These numbers should be traceable to the respective inspection/ test reports if conducted.
- III. The fabricated drum assembly should be packed properly and protected from environment like, humidity, vibration, shock, etc. Necessary desiccants, humidity indicators should be provided in the package in order to keep the package intact.