

- e) Contractor's aggregate liability to pay Liquidated Damages (LD) for failure to attain the performance guarantee shall not exceed ten percent (10%) of the Contract Price.
- f) In case it is found that the equipment/system has failed to meet the guarantees, the Contractor shall carry out all necessary modifications and/or replacements to make the equipment/system comply with the guaranteed requirements at no extra cost to the Employer and re-conduct the performance guarantee test(s) with Employer's consent. In case the specified performance guarantee(s) are still not met, Employer will accept the equipment/system/plant after levying liquidated damages.

B.2. Functional Test

B.2.1. Functional - CO₂ Capture, Compression and Storage Block:

| S.No. | Description | Value |
|-------|--|---|
| 1 | Quality of CO ₂ Captured | > 99.4 (Mole % - Dry basis), > 96.4 (Mole % - Wet basis) |
| 2 | CO ₂ Captured from Flue Gas | > 90% (Mole %) |
| 3 | Solvent Make Up | < 0.35 Kg/Ton of CO ₂ |
| 4 | Steam Consumption | < 1.25 Ton/Ton of CO ₂ |

B.2.2. Functional Test - Carbonated Brick (C-Brick) Manufacturing Block:

| S.No. | Description | Value |
|-------|---|--|
| 1 | CO ₂ Mineralization in C-Brick | > 5 % (Weight) |
| 2 | C-Brick - Drying Shrinkage | < 0.15% (Average of 3 bricks, IS-4139) |
| 3 | C-Brick – Efflorescence | < Moderate (IS-3495) |
| 4 | C-Brick – Water Absorption | < 20% of Mass (IS-3495) |

B.2.3. Functional Test - General:

- a) Functional Tests shall be carried out after successful completion of 'Trial Operation'.
- b) Trial Operation shall be carried out for 24 continuous hours at full plant capacity i.e 2,00,000 C-Bricks/day.
- c) Functional Tests duration shall be at least 24 continuous hours.
- d) Bidder shall provide the Functional Test procedure for approval of NTPC.
- e) Functional Tests shall be carried out as per the approved Functional Test procedure. Functional Test procedure shall be submitted and finalized within 60 days and 120 days respectively from the date of Notification of Award.

- f) The Bidder shall be responsible for providing all material, equipment and manpower, specified or otherwise, which are required to carry out Functional Tests.
- g) There shall be no monetary penalty in case Functional Test parameters are not met. However, the Contractor shall carry out all necessary modifications / replacements to make the equipment/system comply with the Functional Test parameters at no extra cost to the Employer and re-conduct Functional Tests with Employer's consent.
- h) In case the specified Functional Tests parameters are still not met, PG Test can be carried out only if all Functional Test parameters are within a band on ±20%.