

D. CO₂ Capture, Compression and Storage Block

D.1 Plant Capacity & Design Considerations:

1	Quantity of CO ₂ Captured	50 TPD
2	CO ₂ Capture Technology	Amine Based Technology
3	Quality of CO ₂ Captured	> 99.4 (Mole % - Dry basis), > 96.4 (Mole % - Wet basis)
4	CO ₂ Captured from Flue Gas	> 90% (Mole %)
5	Solvent Make Up	< 0.35 Kg/Ton of CO ₂
6	Steam Consumption	< 1.25 Ton/Ton of CO ₂
7	Flue Gas Composition (Wet basis) (With Flue Gas Desulphurization in service)	Temperature : 50 - 70 °C O ₂ : 6 - 9 % (Vol) CO ₂ : 9 - 12 % (Vol) SO _x : 125 - 200 mg/Nm ³ NO _x : 250 - 600 mg/Nm ³ SPM : 40 - 75 mg/Nm ³
8	Flue Gas Composition (Wet basis) (Without Flue Gas Desulphurization in service)	Temperature : 136 °C O ₂ : 6.0 - 9.0 % (Vol) CO ₂ : 9 - 12 % (Vol) SO _x : 1500-2100 mg/Nm ³ NO _x : 250 – 600 mg/Nm ³ SPM : 50 - 100 mg/Nm ³