

Utility Requirements per MT CO₂

Fuel ¹	No. 2 Diesel Oil (0.25% Sulphur)	410 ltr/M-T CO ₂
Fuel ²	Natural Gas (min 97% Methane)	461 Nm ³ /M-T CO ₂
Fuel ³	Kerosene (0.25-0.5% Sulphur)	410 ltr/M-T CO ₂
CO ₂ Absorbing Solution	Monoethanolamine	1-3 kg/M-T CO ₂
Sodium Carbonate (Soda Ash)	SO ₂ Scrubbing (based on 0.5 Wt% sulfur in fuel)	7.4 kg/M-Ton CO ₂
KMnO ₄	Change approximately once per week depending on purity of fuel	0.28 kg/M-Ton CO ₂
Special Media	Replace approximately every three (3) months	0.5 kg/M-Ton CO ₂
Activated Carbon		0.011 kg/M-Ton CO ₂
Desiccant	Replace approximately once every two (2) years	0.006 kg/M-Ton CO ₂
Cooling Water at 32.0°C based on 28°C Wet Bulb	Generator CO ₂ Compressor Liquefier	367.2 m ³ /M-Ton 16.1 m ³ /M-Ton 75.6 m ³ /M-Ton
	<u>Total Recirculated Flow</u>	<u>458.9 m³/M-Ton</u>
Make-Up Water	Cooling Tower Evaporation Loss D.C. Cooler/SO ₂ Scrubber (to drain)	1-2% 0.9 m ³ /M-Ton
	<u>Total Water Consumption</u>	<u>8.3 m³/M-Ton</u>

Power Requirements 1000Kg/Hr CO₂ Production Plant

	<u>Connected</u>	<u>Consumed</u>
Generator	44.76 KW	38.04 KW
CO ₂ Purification Electric Heater	1.0 KW	0.85 KW
CO ₂ Compressor	110 KW	93.5 KW
CO ₂ Dryer (2 hrs/8 hr period)	7.5 KW	6.4 KW
Refrigeration Compressor	75 KW	63.75 KW
Storage Tank	3.7 KW	1.9 KW
CO ₂ Vaporizer	1.4 KW	1.2 KW
Cylinder Filling Unit	5.5 KW	4.67 KW
Cooling Tower	29.8 KW	25.33 KW
Water Pump	22.37 KW	19.01 KW
<u>Total Installed Requirement</u>	<u>301.03 KW</u>	<u>254.65 KW</u>





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