In a normal scenario in the Indian Investment Casting industry, A company manufacturing 110 MT/month will emit approximately 4,18,000 Kgs of CO2 considering that 1 Kg of Investment Castings produced results in consumption of 4 KWh (this is based on our data of production and the electricity consumption). 75% power generated in India is from coal-based thermal power plants[1].

Calculation: 110 (MT) × 1000 (convert to Kgs) × 950 grms[2] (CO2 emitted from 1 KWh power generated from coal) × 4 (1 Kg Investment Casting produced uses 4 KWh) = 41,80,00,000 grms.

On the other hand, Austin Alloy Cast by using green solar power emits CO2 emission equivalent of 2,31,000 Kgs leading to reduction in our carbon footprint by 1,87,000 Kgs.

Calculation:

Solar Power Emission = 55 (MT) × 1000 × 100 grms[2] (CO2 emitted from 1 KWh power generated from Solar) × 4 = 2,20,00,000 grms

Coal-based Thermal Power Emission = 55 (MT) × 1000 × 950 grms × 4 = 20,90,00,000 grms.

To conclude, we manufacture Investment castings with a lower carbon footprint emitting 1,700 grms less CO2 for every 1 Kg of casting produced.

Data Source Footnote:

1) https://coal.nic.in/en/major-statistics/generation-of-thermal-power-from-raw-coal
2) https://www.planete-energies.com/en/media/article/electricity-generation-and-related-co2-emissions

Satellite Image of our Group Solar Farm

At a Group Level, we use a total green energy of 7 MW generated from our company owned wind turbines and solar power plant