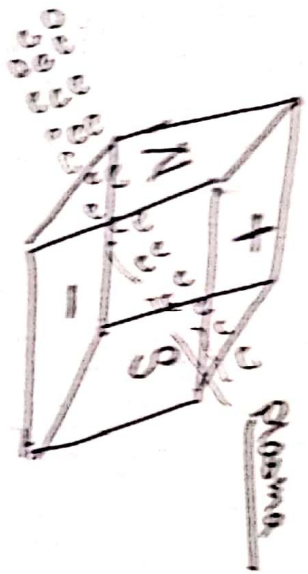
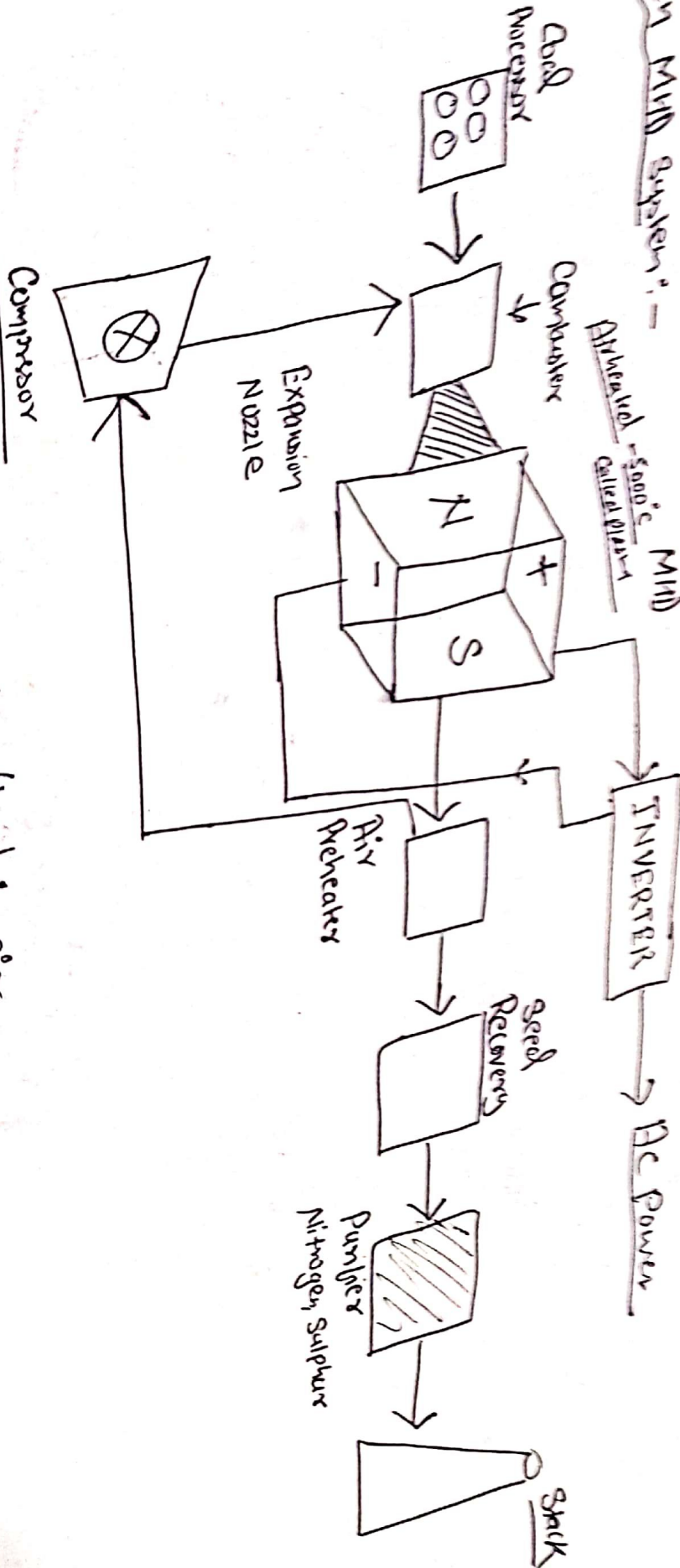


MWD Principle



Open MWD System:-

Attracted  $\sim 5000^\circ\text{C}$  MWD  
called plasma

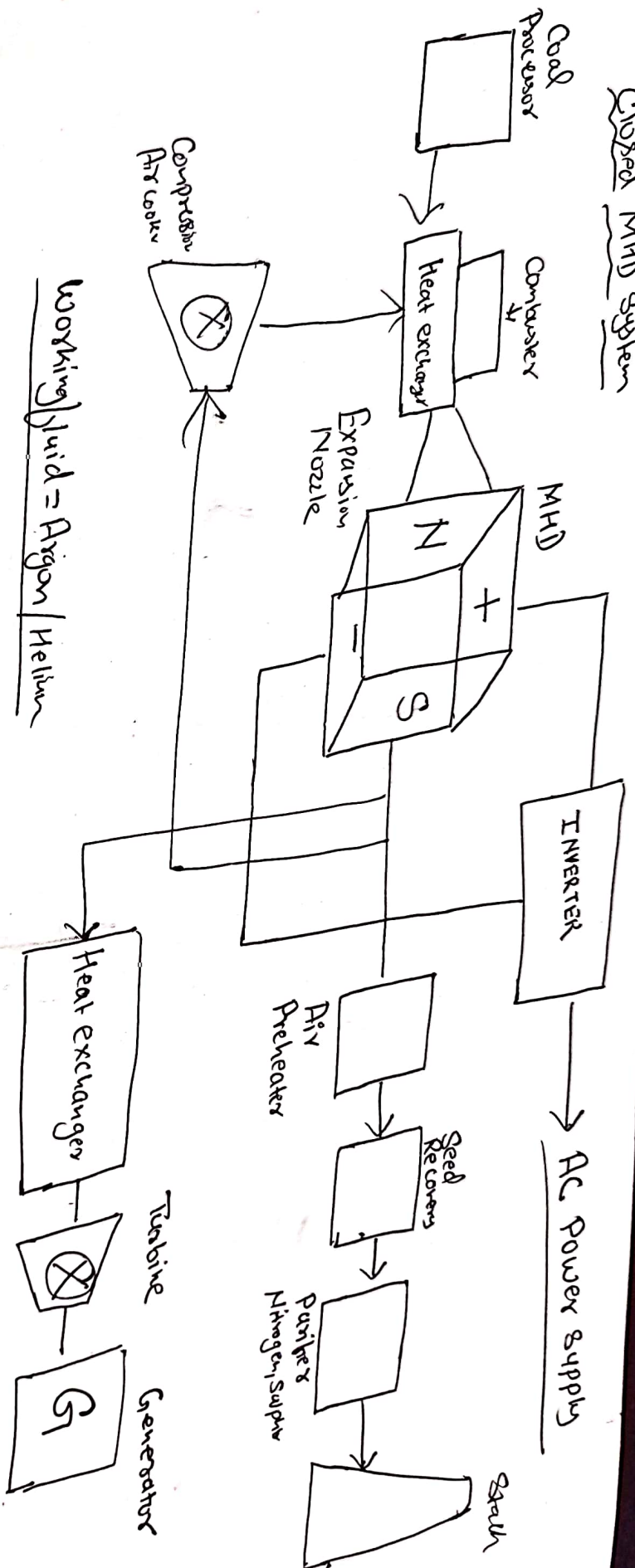


How working based on air

→ In open cycle MHD system, atmospheric air at very high temp. and pressure is passed through the strong magnetic field. Coal is first processed and burnt it into compounds at high temp. about 2700°C and 12-150 pressure, through which the air is converted into plasma. Then this plasma is passed through the MHD system where the plasma get ionised through which DC current is form, with the help of inverter we can turn into in AC form and send it to use.

After MHD system, the used ionised gas is send to Air-Preheater where we can heat it again and send it to seed recovery where. Effluve will recover in seed recovery box. After the gas has some pollutant like Nitrogen, Sulphur are removed in purifier. After purifier the gas is send to the atmosphere through stack.

Closed MHD System



Working fluid = Argon / Helium

→ Coal processor will process the coal and send it to the compressor. Then compressor will exchange the heat with the heat exchanger then argon will be converted into vapour and these argon gas is sent to MHD system where compressed ions generate which is sent to the inverter and convert it into AC form. After this all process as like open MHD system. But after these expansion of heat is used for power generation. After MHD system the heat argon gas is sent to heat exchanger where steam is generated and with the help of steam turbine is rotated then generator will generate electricity.