GASIFICATION OF POWDERY BIOMASS/COAL/INDUSTRIAL WASTES

Brief Description:

Gasifier reactor has been adopted to improvise the mixed flow and plug flow reactor characteristics to ensure full suspension of powdery biomass/coal in a vigorous radial mixing condition in the reactor and to achieve high intensity reaction and gasification which are essential for entrained flow gasification. The gasifier-reactor attains a temperature in the range of 900-1200°C to take the advantages of the kinetics of the process and produce low tar and char formation. The endothermic steam induced reactions with a steam injection coupled with the gasification reactions conserves the sensible process heat in the form of more hydrogen and carbon monoxide.

Major application area of this technology is Rice Mills, Coir industries, Saw Mills & other agro-processing industries. Raw material and machinery.

Comparative Advantages:

- Capable of handling feed stocks with wide range of particle sizes
- Renewable source of energy generation
- Reduction in carbon emission
- Value addition to huge agro-wastes/industrial wastes

Scale of development: Licensed awaiting commercialisation



