Husk /Biomass Power

Non conventional energy sources

Why Husk Power:- 40 % of the Total grain production in India is Rice (90 M tons), Husk as a by product in rice milling is largely wasted or under utilized Cultivation & Processing of Paddy is well distributed throughout the country A large population is connected to Rice (staple diet, cultivation, milling) 20 % is husk out of 120 Mil tons of paddy = 25 mil tons.

50 % of 25 mil tons of husk if used can generate up to 10,000MW of power

Amongst all the processes involved in Rice Processing, Husk is the most neglected and power from by product can make rice mill power free and positive impact on this will affect the whole industry.

TO MAKE RICE MILL POWER FREE !!!!

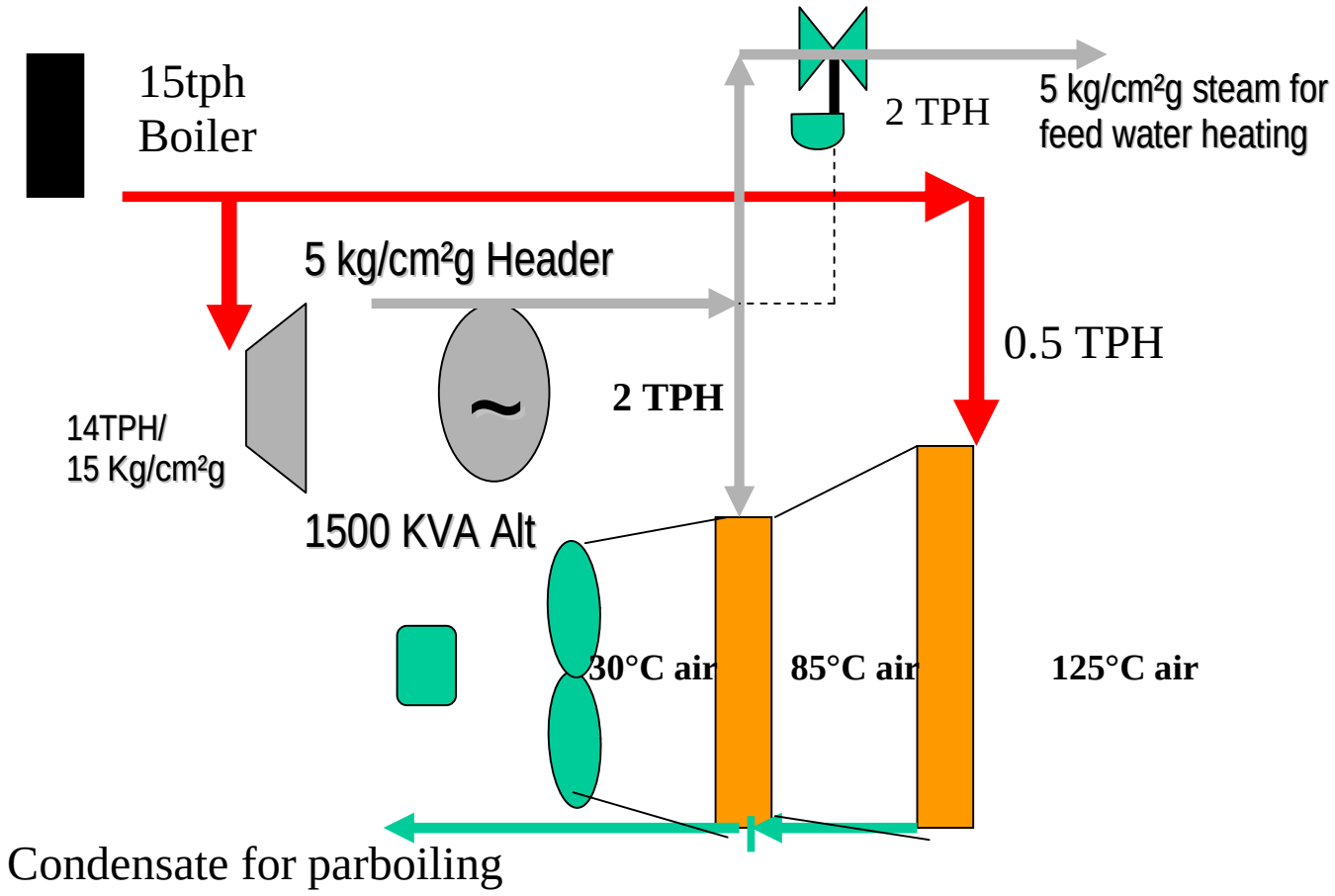
Market Situation :-

- Power tariffs are going up, Oil power is becoming expensive day by day.
- Large and growing market (specially non-*basmati* rice)
- Applications other than DG power have a good potential, but not easily available
- Price - performance equation is very attractive for Husk power
- Fossil fuel is becoming dearer and pollution control norms becoming stricter
- New trend of power free rice mills is catching up
- Millers are ready to invest if it benefits them.
- Less than 3 Rs / unit is very attractive compared to 8 Rs / unit for DG sets
- Power sold to Govt/electricity board @ Rs 7/unit , many remote areas don't get continues power from SEB's

The Process Flow:-

Paddy Intake	**:**	**12 Tons per hour (Husk 2.5 TPH based on the rice variety being milled)**
Power	**:**	**1000 KW, rice mill can run continuosly** **- 12 TPH Boiler @ 45-55 Kg/Cm2 pressure** **-will give 1000 KW of power**
Steaming	**:**	**Steam from turbine is used for process of parboiling and Paddy Drying**
Drying	**:**	**Dryer / air heater air can heated using steam in 2 or 3 passes depending on the Output required.**
Grid supply	**:**	**Excess power to be synchronized to grid.**

Husk Based Power Generation Scheme For 12 TPH Rice Mill



New Thoughts, New Directions :-

Macro Trends:-

Government friendliness to Renewable energy
Lowering of Interest rates / duties
Subsidies

Movements in power sector
Changes in tax structure
Power tariffs increasing, fossil fuel depletion
Petroleum prices touching 60 USD / Barrel
Direct benefit to exchequer
Linking of millers goals to profits

Rice power !