## Comparison of Steam Injected Stove Technology

| Steam Injection<br>Method | Flame color         | Burning<br>Rate<br>(kg/hr-m²) | Steam<br>Consumption<br>(lph) | Fuel to<br>Steam<br>Ratio | Thermal<br>Efficiency<br>(%) | Power<br>Output<br>(kW) |
|---------------------------|---------------------|-------------------------------|-------------------------------|---------------------------|------------------------------|-------------------------|
| Without Steam             | Yellow with red     | 52.17                         | -                             | -                         | 7.8                          | 0.93                    |
| Saturate Steam            | Yellow to<br>orange | 54.0-71.9                     | 1.23-1.35                     | 2.8-3.4                   | 7.8-9.0                      | 0.97-<br>1.49           |
| Super Heated<br>Steam     | Pink to<br>yellow   | 43.9-53.1                     | 1.25-1.44                     | 2.24-2.56                 | 10-1-12.0                    | 1.2-1.35                |

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Without Steam

Saturated Steam

Superheated Steam

## Super Turbo II (superheated steam) Quasi Gasifier Stove (saturated steam)

The burnt rice husk from super turbo stove is still in the form of char. The quality of char depends on the frequency of moving the grate lever.

Char

Grate Lever