

| <b>Vigas Model 40kw with AK 4000 Lambda Controller</b>                              |                        |   |
|---|------------------------|---|
| <b>Technical Data Sheet</b>   |                        |   |
| <b>Nominal Boiler Output</b>  |                        | <b>136,000 BTU</b>  |
| <b>Boiler Class According to EN 303-5</b>   |                        |   |
| <b>Maximum Operating Pressure</b>   |                        | <b>Bar (3 Bar=43 PSI) 3</b>   |
| <b>Fuel</b>   |                        | <b>Maximum Wood Moisture 15-20%</b>   |
| <b>Output BTU Capacity</b>  |                        | <b>27k-140k</b>   |
| <b>Fuel consumption w/nominal output</b>  | <b>Pounds per hour</b> | <b>24.6</b>   |
| <b>Chimney draught</b>  | <b>Inches of H2O</b>   | <b>.08-.14</b>  |
| <b>Weight</b>   | <b>Lbs.</b>            | <b>1015</b>   |
| <b>Height w/regulator</b>   | <b>Inches</b>          | <b>54.53"</b>   |
| <b>Height of Exhaust Branch</b>   | <b>Inches</b>          | <b>51.57"</b>   |
| <b>Height of Inlet Branch</b>   | <b>Inches</b>          | <b>4.92"</b>  |
| <b>Height of feed/water valve</b>   | <b>Inches</b>          | <b>2.75"</b>  |
| <b>Height of chimney neck</b>   | <b>Inches</b>          | <b>43.30"</b>   |
| <b>Width including rod</b>  | <b>Inches</b>          | <b>25.39" including chimney damper</b>  |
| <b>Width including shell</b>  | <b>Inches</b>          | <b>23.22" width casing</b>  |
| <b>Depth</b>  | <b>Inches</b>          | <b>42.15" with fan</b>  |
| <b>Exhaust</b>  | <b>Inches</b>          | <b>9.44" exit hot air</b>   |
| <b>Diameter OD Draught Neck</b>   | <b>Inches</b>          | <b>7.87" ascension throat diameter</b>  |
| <b>Dimension from edge of Boiler</b>  | <b>Inches</b>          | <b>12.00"</b>   |
| <b>Spacing of feed pipes</b>  | <b>Inches</b>          | <b>15.94"</b>   |
| <b>Diameter of Inlet Port</b>   | <b>Inches</b>          | <b>2"</b>   |
| <b>Diameter of Exhaust Port</b>   | <b>Inches</b>          | <b>2"</b>   |
| <b>Diameter of Feed Water Valve</b>   | <b>Inches</b>          | <b>1/2"</b>   |
| <b>Volume of Water</b>  | <b>Gallons</b>         | <b>24.56</b>  |
| <b>Gas Temperature With Nominal Output</b>  | <b>°F</b>              | <b>464°</b>   |
| <b>Gas Temperature With Minimal Output</b>  | <b>°F</b>              | <b>302°</b>   |
| <b>Dimensions of Fuel Chamber</b>   |                        |   |
| <b>Depth</b>  | <b>Inches</b>          | <b>22.04"</b>   |
| <b>Width</b>  | <b>Inches</b>          | <b>17.32"</b>   |
| <b>Height</b>   | <b>Inches</b>          | <b>29.52"</b>   |
| <b>Max Weight of Fuel</b>   | <b>Lbs.</b>            | <b>105 lbs.</b>   |
| <b>Fuel Chamber Capacity</b>  | <b>Ft<sup>3</sup></b>  | <b>6.53</b>   |
| <b>Dimensions of Gasification Chamber</b>   |                        |   |
| <b>Gas Chamber (W)</b>  | <b>Inches</b>          | <b>17.12"</b>   |
| <b>Gas Chamber (H)</b>  | <b>Inches</b>          | <b>10.03"</b>   |
| <b>Noise</b>  | <b>Decibel (dB)</b>    | <b>47.7</b>   |
| <b>Max Electric Output</b>  | <b>W</b>               | <b>70</b>   |
| <b>Voltage Frequency</b>  | <b>V/Hz</b>            | <b>120 Volts AC/60 Hz</b>   |
| <b>Pressure Loss of Water</b>   | <b>Feet of head</b>    |   |
| <b>ΔT 50° F</b>   |                        | <b>.35'</b>   |
| <b>ΔT 68° F</b>   |                        | <b>.08'</b>   |
| <b>Time of burning with Nominal Output</b>  | <b>Hours</b>           | <b>4.3</b>  |
| <b>Cooling exchanger of heat Temperature of inlet water Pressure of inlet water</b> | <b>°F<br/>PSI</b>      | <b>39°-59° F<br/>Min 14 PSI-Max 58 PSI</b>  |
| <b>Safety</b>   |                        | <b>Release valve Honeywell TS 130 3/4" for safety exchanger against overheating. Opening temperature 203°F.</b> |
| <b>Weight flow of gases</b>   | <b>Kg/s</b>            | <b>0.034-0.047</b>  |