Trapezoidal stoker duct reduces power consumption and ensures flexibility for varying fuel sizes. The industry standard drive gear unit is durable and mechanically isolated from the feed channel. This prevents the screw movements from affecting the gear unit.

Second ignitor (optional) for heating material that is hard to light.

High temperature combustion chamber with 4-layers (firebrick/1st layer of insulation/ air jacket/ 2nd layer of insulation) made of premium, heat resistant fireclay components for optimal combustion, even with low grade fuel (e.g. high moisture level, etc).

High-temperature post combustion zone with hot fireclay lining prolongs combustion. This increases efficiency even further, particularly with inferior fuels.

Moving grate for a reliable and stable combustion process with ongoing removal of combustion residue. The innovative primary air zone separation system produces exceptional combustion results.

Vertical, patented 4-pass heat exchanger with integrated suction cyclone unit for dust separation plus an Efficiency Optimization System (EOS) with automatic cleaning of the heart exchanger tubes.

Case cooling of the combustion chamber minimizes radiant heat. The captured heat is specifically used to preheat the combustion air.

Flue gas recirculation FGR (optional) optimizes burning (output, emissions, etc) with particularly demanding fuels, (e.g. pellets, shavings, etc).

Speed-regulated and function monitored induced draft fan together with the under-pressure controller ensure that the system continuously adapts to changes in fuel and the chimney conditions.

Multi-layer thermal insulation guarantees minimum radiant heat losses.

Large, solid combustion chamber doors ensure ease of access for maintenance.

- Easy to service
- ASME stamped pressure vessel
- Fully automatic
- Lambda control
- Underpressure control
- For commercial or industrial use
**Dimension Data**

- **H1** Total height \(\text{inches} \quad 107 \frac{1}{16}\)
- **H3** Height of return connection \(\text{inches} \quad 27 \frac{15}{16}\)
- **H4** Height, supply connection \(\text{inches} \quad 78\frac{3}{4}\)
- **H5** Height of flue connection without FGR \(\text{inches} \quad 38\frac{3}{4}\)
- **H6** Height of flue connection with FGR \(\text{inches} \quad 81\frac{11}{16}\)
- **B** Total width of the system \(\text{inches} \quad 117\frac{11}{16}\)
- **B1** Width of boiler \(\text{inches} \quad 98\frac{7}{16}\)
- **B2** Width of heat exchanger \(\text{inches} \quad 50\frac{3}{8}\)
- **L** Total length \(\text{inches} \quad 144\frac{1}{8}\)
- **L1** Length of boiler \(\text{inches} \quad 102\frac{3}{4}\)
- **L2** Length of stoker arm \(\text{inches} \quad 41\frac{1}{4}\)

**Technical Data**

**Nominal heat output**
- **400** BTU/hr \(1,365,000\)
- **500** BTU/hr \(1,706,000\)

**Electrical connection**
- \(480 \text{ V} \ 60\text{Hz}\)

**Flue gas pipe diameter**
- \(\text{inches} \quad 14 \quad 14\)

**Diameter of stoker screw**
- \(\text{inches} \quad 7\frac{3}{8} \quad 7\frac{3}{8}\)

**Total weight incl. fittings**
- \(\text{pounds} \quad 18,519 \quad 18,519\)

**Water capacity**
- \(\text{gallons} \quad 198 \quad 198\)

**Maximum operating temp.**
- \(\text{°F} \quad 194 \quad 194\)

**Minimum return temp.**
- \(\text{°F} \quad 149 \quad 149\)

**Maximum operating pressure**
- \(\text{PSI} \quad 60 \quad 60\)

**Flue gas temp. at nominal load**
- \(\text{°F} \quad 284 \quad 284\)

**Permitted fuel**
- Wood pellets
- Wood chips
- \(\varnothing \frac{1}{4}" (6\text{mm})\) PFI Premium Grade
- Moisture Content: (20-40%)
- Particle size: \(\frac{1}{8}" \leq \text{to} \geq 1 \frac{3}{4}"

*Dimensions are subject to technical alterations.*