Sussman ES Packaged Electric Steam Boilers

Suitable for industries requiring efficient, high quality saturated steam, including laboratories, hospitals, industrial plants, pilot plants and chemical processing applications.

These versatile generators are perfect for almost any application requiring steam from 0-80 PSIG. Each unit is complete with automatic features, including pressure and liquid level controllers, ASME Code pressure vessel and safety valve and are fully tested under power. Each one must pass Sussman’s rigid quality control inspection before it is shipped.

Sussman Electric Boilers - your source for fast economical steam energy.

ES Series Features:
- Safe easy-to-use heat source. No on-site products of combustion
- Easy, quick to install, they require only a water feed connection and electrical hook-up
- Applications include: Steam for tanks, reactors, distillations, autoclaves, dyestuffs, cosmetics, paraffins, glues, steam jacketed kettles, sterilizers, pipe tracing and humidification.
- Built to Section 1 of ASME Boiler and Pressure Vessel Codes.
- UL listed.

**Boiler Model No.**

<table>
<thead>
<tr>
<th>Boiler Model No.</th>
<th>Water Inlet</th>
<th>Steam Outlet</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES 12 – ES 18</td>
<td>1/2” NPT</td>
<td>1/2” NPT</td>
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<tr>
<td>ES 24 – ES 72</td>
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<tr>
<td>ES 85 – ES 100</td>
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<td>1-1/2” NPT</td>
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<td>ES 135 – ES 180</td>
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<td>2” NPT</td>
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</tbody>
</table>

**ES Series**

Lbs/Hr Sat. Steam: 36 to 542
KW Rating: 12 to 180
ASME Rating 100 PSIG
Operating PSIG Range 0-80 PSIG Max

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**ES-Standard Features**

- **WATER FEED SYSTEM** - Strainer, solenoid valve, stop valve and check valve factory wired and plumbed for direct connection to water line.
- **LOW WATER CUT-OFF/LEVEL CONTROL** - McDonnell Miller No.150 control automatically maintains proper water level, shutting off the boiler when water supply in the boiler drops below a safe operating level.
- **WATER LEVEL SIGHT GLASS** - Allows constant observation of water level while boiler is in operation.
- **MAIN ON/OFF SWITCH** - Allows manual operation of the boiler operating control circuit.
- **PILOT LIGHT** - Indicates control circuit’s on/off condition.
- **INTEGRAL POWER CONTACTORS** - Magnetic contactors for energizing the boiler elements. Integrimounted in the control unit.
- **BLOWDOWN/DRAIN VALVES** - Facilitates emptying the boiler pressure vessel and MM150 water column piping during blowdown sequence.
- **LONG LIFE HEATING ELEMENTS** - Industrial grade, heavy duty 0.420 inch diameter stainless steel heating elements, equipped with one piece resistance welded terminations for added strength and safety.
- **OPERATING PRESSURE CONTROL** - Resets automatically to maintain preset pressure within boiler.
- **ENERGY SAVINGS AND MINIMUM MAINTENANCE** - Pressure vessel insulation minimizes heat loss and maximizes energy savings, insured by fibrous glass material.
- **EASY CONTROL MAINTENANCE** - All control panels and components are easily accessible. Fully-louvered openings avoid component heat build-up.
- **NEMA 1 Louvered enclosure standard**
- **TRIM PRESSURE** - Factory standard 100 PSIG or 15 PSIG

**Meeting Code Requirements**

- Pressure vessel rated at 100 PSIG to ASME Section I. Vessel National Board Registered
- UL and cUL Listed
- Electrical construction conforms to NEC standards.

**Safety Features**

- **STEAM SAFETY VALVE** - Automatically opens to reduce pressure should excessive steam cause pressure build-up.
- **STEAM PRESSURE GAUGE** - Allows visual observation of steam pressure over full range.
- **MANUAL RESET PRESSURE CONTROL** - Provides high limit pressure cut-out with manual reset.
- **AUXILIARY LWCO with Manual Reset** - Standard electronic back-up to primary MM150 control.

**Optional Equipment**


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**Specifications for ES Boilers**

<table>
<thead>
<tr>
<th>Boiler Model</th>
<th>kW*</th>
<th>BHP Rating</th>
<th>Lbs./Hr. Steam**</th>
<th>3 Phase Volts</th>
<th>Amps</th>
<th>Dimensions (in)</th>
<th>Shipping Wt.</th>
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Notes:
- * Single phase available
- ** Lbs/hr steam at 212° F with 50° F feedwater
- † Other voltages available
- †† Allow 21 inches for heating element removal