AREMCO

ECONO-HEAT[™] HIGH TEMPERATURE FURNACES

Technical Bulletin E2

Aremco offers a complete line of electric box furnaces from 0.5 to 7.5 cubic feet for applications to 2350 °F. All furnaces are ruggedly constructed and energy efficient, and a wide range of temperature controls are offered for every type of use. Custom features and sizes are also available upon request.

PRODUCT HIGHLIGHTS

- All furnaces are built with 3" premium insulating firebrick and 1" fiber board to permit rapid firing.
- Elements are protected in dropped recessed side wall grooves to provide even heating, longer life, and easy replacement.
- Outer shells are constructed using stainless steel to improve the casing resistance to high temperatures.
- Front-loading and top-loading door styles are offered.
- Alternate power requirements for domestic and international use are easily accommodated.
- Replacement elements are available on a just-in-time basis.
- User-friendly programmable controller.

TYPICAL APPLICATIONS

- Ash Determinations
- Assaying
- Tempering
- Hardening
- Heat Treating
- Glass Annealing
- Melting
- Fusions
- Dry Precipitates
- Curing Plastics

- Thermal Cycling
- Carbon & Sulphur Tests
- Cement Tests
- Glass & Enamel Tests
- Jominy Hardness Tests
- Petroleum Tests
- Powder Metallurgy
- Thermocouple Standardization
- Ceramic Tests
- Ignitions

TEMPERATURE CONTROLLER

All Econo-Heat[™] furnaces are built using the Sentry Xpress 4.0 Temperature Controller by Orton. This controller is a 3-button, 4-segment LED controller that provides 5 built-in speed settings (ramp rate) and the capability to store up to 4 programs with a maximum of 8 segments per program. This flexible, user-friendly controller enables quick and easy programming by the operator.

OPTIONS

Econo-Heat[™] furnaces can be modified to include useful features such as view ports, entry holes, or gas intake and exhaust fittings. Larger area and ultra-high temperature furnaces are also available. Contact Aremco's sales engineering department to discuss your requirements.



Econo-Heat[™] 2928 Furnace. This model has a work area of 13" × 13 ½" × 8 ¾" and is equipped with a single set point analog temperature controller.



The Econo-Heat[™] furnace shown is a custom unit designed for an aerospace manufacturer for use in heat treating. This furnace has a work area of $42'' \times 42'' \times 65''$, and a unique temperature control system consisting of 21 elements each with its own infinite control switch to permit uniform heating of complex shapes.



Econo-Heat[™] 2931 Top-Loading Furnace. This model has a work area of 17" × 20" × 17" and is capable of 2400 °F operation using single phase service, 240 Volts and 40 Amps.

| Model No. | Size (W″x D″ x H″) | | Style | | Power | | | Maximum Temp. | Approx. | Heating Elements |
|-----------|--------------------|-------------------|------------|----------|-------|-----|-------|---------------|--------------|------------------|
| | ID | OD (Approx) | Front Load | Top Load | Volts | Amp | Phase | °F (°C) | Weight (lbs) | Per Unit |
| 2927 | 8.5 × 9 × 8.75 | 16.5 × 17 × 21.75 | х | | 120 | 15 | 1 | 2350 (1288) | 80 | 2 |
| 2928 | 13 × 13.5 × 8.75 | 21 × 21.5 × 21.75 | х | | 240 | 15 | 1 | 2350 (1288) | 110 | 2 |
| 2929 | 22 × 22 × 13.5 | 30 × 30 × 26.5 | х | | 240 | 45 | 1 | 2350 (1288) | 295 | 3 |
| 2930 | 15 × 18 × 15 | 29.5 × 29 × 29 | | х | 240 | 30 | 1 | 2350 (1288) | 280 | 4 |
| 2931 | 17 × 17 × 20 | 31 × 31 × 31 | | Х | 240 | 40 | 1 | 2350 (1288) | 300 | 4 |
| 2932 | 21.5 × 21.5 × 24.5 | 31 × 36 × 35 | | Х | 240 | 45 | 1 | 2350 (1288) | 410 | 5 |

ECONO-HEAT™ 2900-SERIES FURNACE SPECIFICATIONS