

1. **Design Criteria:** The equipment has sufficient capacity to heat 1,800 pounds of composites and 400 pounds of a steel load cart from 70° to 350° F within 180 minutes when loaded into a ambient oven, provided the configuration of the load is such that it will absorb the heat generated and delivered within the time allowed; since we have not had the opportunity to perform testing on your product, our proposal does not include a guarantee in regard to part heat up time or temperature; please contact us if this is required, as we can offer special testing upon request.
2. **Temperature Rating:** Maximum - 500° F Normal - 350° F
Minimum - 70° F above ambient
3. **Temperature Uniformity:** ±10° F at 150° F and 350° F documentation of the temperature uniformity testing and final adjustments to obtain the tolerance shown above are included as part of this proposal; the temperature survey will be a standard nine (9) point profile test conducted in an empty oven chamber under static operating conditions
4. **Chamber Dimensions:** 8'0" wide x 10'0" long x 8'0" high
5. **Overall (approximate):** 11'6" wide x 11'0" long x 11'9" high
6. **Body Construction:** Tongue & groove panel assemblies featuring our patented high efficiency panel seams (provides 25% better insulating efficiency) with 4" of 6# density, industrial board type insulation with a 1,200° F service temperature rating; 20 gauge aluminized interior; 20 gauge carbon steel exterior; 12 gauge base and roof trim
7. **Doors:** Bi-parting, side-hinged, horizontal swing doors at one (1) end; heavy gauge exterior with integral welded structural frame; ball-bearing hinges; FM approved safety latches
8. **Floor:** Oven floor not included, oven must be located on a non-combustible floor which is rated for the maximum operating temperature of the oven
9. **Recirculation:** 6,000 CFM @ 7 ½ HP direct-driven blower; motor complies with NEMA Premium Efficiency Standards;
 - low maintenance (No drive belts!), quiet operation and energy efficient
 - combination airflow; provides both horizontal and vertical upward airflow, which maximizes heating rates and temperature uniformity of the product
 - supply air will be delivered through fully adjustable boxed ducts (louvered openings are factory preset), side-mounted along the length on each side of the work chamber
 - return air will be returned to the recirculation and heating plenum through a fully adjustable return duct located above the work chamber
 - airflow safety switch (proof-of-blower operation)
10. **Exhaust:** 400 CFM @ ½ HP exhaust blower with motorized dampers on both the fresh air inlet and exhaust outlet for controlled heating and cooling capabilities; oven rated for Class A use where flammable volatiles are processed. The exhaust system has sufficient capacity to render nonflammable the volatile vapors from ¼ gallon of solvent per batch at the normal operating temperature (please confirm quantity at time of order to ensure the system is designed for safe and energy efficient operation); airflow safety switch (proof-of-operation); exhaust stack not included

11. **Heating Equipment:** 84 kW heat input at the voltage indicated below under “Utility Requirements”; incoloy sheathed elements; SSR power control with back-up contactors; heaters wired individually so if one fails, the oven will continue to operate until maintenance can be scheduled
12. **Controls and Instruments:** Located in a NEMA 12 enclosure mounted on the right side of the oven with the instruments and controls mounted on the side of the panel facing the front of the oven, including the following major components:
 - digital Eurotherm 3504 programmable temperature controller (25 programs with 500 segments); fast acting advanced auto-tune function (auto-tune function not only works with PID parameters but it also features special cutback settings to help eliminate overshoot; 0.1% PV accuracy)
 - digital oven high limit instrument, FM approved, with manual reset
 - IEC style motor starters, push buttons and pilot lights (to indicate status), fused branch circuits, 110 volt control transformer and blower interlocks
 - does not include a main power disconnect switch with interlock to help prevent unauthorized personnel from opening control panel door when the disconnect switch is “ON”
13. **Insurance and Other Specifications:** FM, NEC, NFPA 79 & 86 recommended equipment; if there are other requirements which must be met (heat-up rates, GE GAP, JIC, CSA, ETL, CE, UL, low NOx, seismic requirements equipment specifications, etc.), contact us for pricing
14. **Utility Requirements:**
 - **Electrical** – 240 volt, 3 phase, 60 hertz
15. **Paint:** The equipment will be painted the following colors:
 - **Oven body** - heat resistant WOC Grey industrial enamel exterior (the aluminized steel interior requires no additional coating)
 - **Control panel** - grey exterior, white interior
 - **Guards** - OSHA yellow
 - **Piping and EMT Conduit** - Unpainted