



Technical Information

GENERAL GUIDELINES FOR DRYING AND INITIAL HEATUP FOR CAST LADLE BOTTOMS

	<u>TIME (HOURS)</u>	<u>TOTAL (HOURS) ELAPSED TIME</u>
1. Ambient to 400° @ 50°F/hr	6	6
2. 400°F to 1000°F @ 25°F/hr	24	30
3. 1000°F to 1200°F @ 50°F/hr	4	34
4. Hold at 1200°F four hours or until interface between working lining and sub bottom reaches 600°F	4	38

NOTES:

Thermocouple locations in ladle bottom

1. At or ½" below working surface of bottom, near hot air from drier impingement area
2. At interface between working lining and sub or back-up lining, between center of ladle and wall

NOTES:

- A. The use of "XR" fibers in the castable does not guarantee a rapid heat-up rate.
- B. But, it does significantly reduce the possibility of internal damage during heat-up.
- C. Temperatures should be monitored at the refractory surface at several locations in the unit.
- D. The schedule should be controlled initially by the hottest area monitored. If this results in exceeding the recommended rate in the coolest area of the unit, then the coolest area should become the control and the schedule picked up again at that point.
- E. If steaming is observed at any time during the schedule, the temperature should be held constant until all steaming subsides. The schedule can be resumed when steaming ends.
- F. If, for any reason, the heating schedule is interrupted by a loss of heat and/or power into the unit, Resco Products recommends that the heating schedule be initiated from the beginning once power and/or heat is restored. At the end user or contractor's discretion, they may elect to attempt to restart the cycle and "stabilize" the lining temperature at the point of interruption. After the lining has been stabilized, the heat up cycle may be resumed as scheduled from that point on. Resco assumes no liability for this procedure, as it is difficult to determine that point at which the entire lining is stable to prevent the possibility of a steam spall.
- G. **This schedule is recommended for situations where proper heating equipment and air circulation are used, weep holes are present and unclogged, and the ambient temperature ranges from 60° to 90° F. If all of these parameters are not met, a more conservative dry out schedule is needed. Consult your Resco Products, Inc salesman, the RESCO website (www.rescoproducts.com), or call 888.283.5505.**