

## **Technical Information**

## SUGGESTED HEATING PROCEDURES RESCOBOND AA-22S

Rescobond AA-22S is an air setting, chemically bonded, erosion resistant refractory material that <u>does not require drying or heating prior to initial startup of the unit</u>, except under the following special conditions:

- It will be used in a wet operating environment
- It will be subjected to hydrostatic testing
- It is installed greater than 2 inches thick

Cyclones lined with 2 inches or less of Rescobond AA-22S do not need to be dried or heated before shipping.

Use the following schedules for those special circumstances where dryout is required:

## A) Less than 2 inches thick:

At any time following the initial 24 hour cure period, raise the temperature at a maximum rate of 100°F (56°C) per hour to achieve a minimum temperature of 650°F (343°C) throughout the thickness of the lining. Allow to cool naturally; do not force cool.

## B) Greater than 2 inches thick:

- 1) At any time after the initial 24 hour cure, raise the temperature to 300-400°F (149-204°C) and hold for 1 hour per inch of thickness up to a maximum period of 8 hours
- 2) Raise temperature at a maximum rate of 75°F (42°C) per hour to operating temperature or 1000°F (540°) which ever is less.
- 3) If the operating temperature is above  $1000^{\circ}\text{C}$  ( $540^{\circ}\text{C}$ ) then heat at the following maximum rate from  $1000^{\circ}\text{F}$  ( $540^{\circ}\text{C}$ ) to operating temperature:
  - Up to 6 inch thickness: 100°F (56°C) per hour
  - Greater than 6 inches thickness: 50°F (28°C) per hour
- 4) If the unit is not going into operation but will be cooled down, hold at the operating temperature for a minimum period of 1 hour per inch (25 mm) of lining thickness up to a maximum period of 8 hours.
- 5) Allow the lining to cool down naturally: do not exceed 100°F (56°C) per hour.
- 6) 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.

Note: The dryout of refractory entails more than just following a heat-up schedule. Issues such as burner size and location, exhaust location, air volume and velocity, etc. need to be addressed. Resco recommends that an experienced dryout company be consulted.