

General questions to determine option for Hot Spot Repair

- 1) Type of thermal unit? (Heater, Cracking Furnace, Reformer, Incinerator, Combustor, Hot Gas Duct etc.)

- 2) Operation temperature?

- 3) Inner flue gas pressure? (If pressure higher than outside and no process procedures to get in lower, HSR will not be possible!)

- 4) Kind of fuel? (Oil, gas, coal etc.)

- 5) Oxidizing or reducing atmosphere?

- 6) Unit, designed by whom? (Lummus, Technip -KTI, Kellog. Foster Wheeler, etc.)

- 7) Type of refractory lining in damaged area? (roof-walls-door- floor);Ceramic fibre (modules or blanket lining), brick lining, refractory concrete?

- 8) Lining thickness ? (as designed)

- 9) How big is damaged area? (Surface in M2)

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- 10) Condition of unit (lining) New/Old, how many years in operation?
- 11) Position of coils (only in petro-chemical units or boilers) versus walls. Drawing or layout available?
- 12) Position of burners? Radiant wall burners and/or floor burners.
- 13) Position of peepholes (if present) versus hot spots?
- 14) Condition of outer casing (plate) ? Thickness?
- 15) Recent thermal scan made/available?
- 16) Recent photos available?
- 17) Is there an emergency cooling running?
- 18) How is access versus hot spot? (terrace , stairways, temporary scaffolding, hoisting cabin)

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