

# QUESTIONNAIRE HOT SPOT REPAIR (HSR)

Please answer the following questions and return the form by e-mail.

From	
Date	
Name customer	
Contact name	
E-mail	
Phonenumber	

## 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?  °C
- 3) Inner flue gas pressure? (If pressure higher than outside and no process procedures to get in lower, HSR will not be possible!)  
 Pa (Pascal)
- 4) Kind of fuel? (Oil, gas, coal etc.)
- 5) Oxidizing or reducing atmosphere?
- 6) Unit, designed by whom? (Lummus, Technip -KTI, Kellogg, 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)  mm
- 9) How big is damaged area? (surface in m<sup>2</sup>)  m<sup>2</sup>
- 10) Condition of unit (lining) New/Old, how many years in operation?  
 Old  years in operation  
 New

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11) Position of coils (only in petro-chemical units or boilers) versus walls.

Drawing or layout available?  Yes  No

12) Position of burners? Radiant wall burners and/or floor burners.

13) Position of peepholes (if present) versus hot spots?

Drawing or layout available?  Yes  No

14) Condition of outer casing (plate) ? Thickness?

 Thickness  mm

15) Recent thermal scan made/available?  Yes  No

16) Recent photos available?  Yes  No

17) Is there an emergency cooling running?  Yes  No

18) How is access versus hot spot? (terrace , stairways, temporary scaffolding, hoisting cabin).

**Any additions:**