Data collection sheet for calculating a gas cooling system

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Dear customer,

to comment on your gas conditioning problem, we would require all data known to you and indispensable for computing.

Company: ..... Date: .....

Address: ..... Contact person: .....

..... Phone/Fax: .....

..... E-Mail: .....

1. Gas data

■ Clinker production (in case of cement plant) ..... t/d

Gas flow [Nm^3/h*, humid]	t inlet [°C]		t outlet [°C]	
max.:	min.:	max.:		
nominal:	min.:	max.:	standard:	max.:
min.:	min.:	max.:		

Gas composition [Vol. %]	H_2O	CO_2	O_2	N_2			

■ Other components of gas (HCl, HF, $CaCl_2$ etc.) ..... [mg/Nm^3*, humid]

■ Dust content in gas ..... [mg/Nm^3*, humid]

■ System pressure (in the reaction area) ..... bar (g)

■ Altitude of the plant ..... meters above sea level

2. Conditions on Site

■ Are gas cooling tower dimensions fixed? ☐ Yes Ø ..... dimensions .....

(Please attach Sketch/drawing of GCT or Duct!) ☐ No Favorite -Ø ..... dimensions .....

■ Available reaction distance .....m. ☐ Reaction distance to be determined.

■ Direction of gas ☐ ⇓ ☐ ⇑ ☐ ⇒

■ Nozzle type: ☐ Single fluid ☐ Twinfluid ☐ Both types possible

■ Complete evaporation required? ☐ Yes ☐ No

■ Is water injection system always in operation? ☐ Yes ☐ No In case the operation is interrupted, running time ..... %

3. Coolant data

■ Coolant water Inlet temperature .....°C

(max. over pressure ..... bar)

■ Atomization air (Twin fluid nozzles) Over pressure bar ..... (g)

4. If available, please attach

■ Process flow sheet ■ Gas cleaning flow diagram

5. Miscellaneous (e.g. reasons for upgrading/improving the system)

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* T_0 = 273 K (0°C), P_0 = 1 bar