



DATA COLLECTION SHEET FOR GAS COOLING SYSTEMS

Dear customer,

for a proper process calculation and design of the gas cooling system, we would require the following data (as far as available).

Company	<input type="text"/>	Date	<input type="text"/>
Adress	<input type="text"/>	Contact person	<input type="text"/>
	<input type="text"/>	Phone/Fax	<input type="text"/>
	<input type="text"/>	E-Mail	<input type="text"/>

1. APPLICATION

2. GAS DATA

	Gas flow rate	T inlet [°C]	T outlet [°C]
Case 1 (min.)			
Case 2 (average)			
Case 3 (max.)			
Case 4 (design)			
Case 5			

For Cement Industry: Clinker production t/d

Gas composition [Vol. %]	H ₂ O	CO ₂	O ₂	N ₂	CO	

Dust content in gas g/Nm³, humid

Further components in gas [mg/Nm ³ *, humid]	HCl	HF	CaCl ₂	SO _x		

system pressure (in cooling area) bar,g altitude of the plant meters above sea level

* Nm³ referring to T = 273,15 K, P = 1,013 bar



3. CONDITIONS ON SITE

Cooling tower/duct dimensions existing new fixed Lechler recommendation

Round Ø mm Rectangular x mm

Active evaporation distance m (Active means: no built ins, reduction of cross section or bows)

Direction of gas ↓ ↑ ⇒ ↗ ↘

Complete evaporation required yes no

Is the gas cooling system always in operation? yes no Batch operation? yes no

In case the operation is interrupted, operation time/week %

Are the nozzle lances in gas flow while not spraying? yes no Number of switch cycles/day

4. NOZZLE DATA

Nozzle type twin-fluid single-fluid (spillback) both types possible

5. MEDIA DATA

WATER

Temperature °C

Available pressure at skid inlet bar,g or after pump bar,g or at lance level bar,g

ATOMIZING AIR

OR N₂

Available pressure at skid inlet bar,g or at lance level bar,g

Available flow rate Nm³/h

If atomization with air or N₂ is not possible:

STEAM

Temperature °C

Available pressure at lance level bar,g

Available mass flow rate kg/h



6. PLEASE ATTACH

- **Drawing of tower including layout of upstream duct and inlet geometry with baffle plates or perforated plates (if installed)**
- **Process flow sheet of gas flow (if available)**
- **P&I diagram of water injection (if available)**

7. ADDITIONAL NOTES (e.g. current issues, reasons for upgrading/improving the existing gas cooling system)

8. YOU REQUEST THE FOLLOWING FROM LECHLER

- Gas cooling calculation
- Budgetary price quotation
- Detailed quotation
- Further information
- Visit