

ANALYZER SOLUTIONS FOR YOUR PROCESS!

## Model 910/920 Mass Emission/Compliance Monitor Application Data Sheet

### A. General

- Company: \_\_\_\_\_
- Location: \_\_\_\_\_
- Process Type:
 

|   |                                    |  |
|---|------------------------------------|--|
| <input type="checkbox"/> Claus SRU        | <input type="checkbox"/> Smelter   | <input type="checkbox"/> Power Boiler        |
| <input type="checkbox"/> Cement Kiln      | <input type="checkbox"/> Pulp Mill | <input type="checkbox"/> Sulfuric Acid Plant |
| <input type="checkbox"/> Power Generation |                                    |  |
- Contact: \_\_\_\_\_ Ph: (\_\_\_\_) \_\_\_\_\_  
 Position: \_\_\_\_\_ Fax: (\_\_\_\_) \_\_\_\_\_

### B. Stack Gas Data

- Gas Composition (mole %)

|                  | Normal | Maximum |               | Normal | Maximum |
|------------------|--------|---------|---------------|--------|---------|
| SO <sub>2</sub>  | _____  | _____   | <b>Others</b> | _____  | _____   |
| CO <sub>2</sub>  | _____  | _____   | _____         | _____  | _____   |
| H <sub>2</sub> O | _____  | _____   | _____         | _____  | _____   |
| N <sub>2</sub>   | _____  | _____   | _____         | _____  | _____   |
| O <sub>2</sub>   | _____  | _____   | _____         | _____  | _____   |
| NO               | _____  | _____   | _____         | _____  | _____   |
| NO <sub>2</sub>  | _____  | _____   | _____         | _____  | _____   |
| CO               | _____  | _____   | _____         | _____  | _____   |

- Unusual Components or Contaminants (incl particulate size and volume) \_\_\_\_\_  
 \_\_\_\_\_
- Pressure: \_\_\_\_\_  kPa (gauge)  psig
- Temperature: normal \_\_\_\_\_  °C  °F    maximum \_\_\_\_\_  °C  °F
- Stack Volumetric Flow Rate, (Q) operating: \_\_\_\_\_  Nm<sup>3</sup>/d  SCFD

### C. Stack Physical Data

- Sample Point Elevation (from grade): \_\_\_\_\_  m  ft
- Inside diameter of Stack @ Sample Point: \_\_\_\_\_  mm  in
- Inside diameter of Annulus @ Sample Point: \_\_\_\_\_  mm  in

4. Flange Face to Stack Center Line @ Sample Point: \_\_\_\_\_  mm  in

5. Flange Size:  ANSI 4" - 150 lbs  Other (specify) \_\_\_\_\_

Bolt Pattern: Do the Holes Straddle Top Dead Center (S TDC)?  Yes  No

If No, attach a sketch of the hole pattern.

## D. Analyzer Location

1. Ambient Conditions:

i) Temperature min: \_\_\_\_\_  °C  °F max: \_\_\_\_\_  °C  °F

ii) Average Barometric Pressure \_\_\_\_\_  mm Hg  kPa  in Hg

**OR**

Plant Elevation above Sea Level \_\_\_\_\_  m  ft

iii) Special Conditions (e.g. Sandstorms, Hurricanes, etc.) \_\_\_\_\_

2. Area Classification (NOTE: Analyzer is GP only):

Shelter:  General Purpose  Hazardous: Class \_\_\_\_\_, Division/Zone \_\_\_\_\_, Group \_\_\_\_\_

Sample:  General Purpose  Hazardous: Class \_\_\_\_\_, Division/Zone \_\_\_\_\_, Group \_\_\_\_\_

## E. Analyzer Full Scale Ranges (Fill in applicable ranges)

SO<sub>2</sub> \_\_\_\_\_  ppm  mole % NO<sub>2</sub> \_\_\_\_\_  ppm  mole %

NO \_\_\_\_\_  ppm  mole % NO<sub>x</sub> \_\_\_\_\_  ppm  mole %

O<sub>2</sub> \_\_\_\_\_ mole %

Q \_\_\_\_\_ units \_\_\_\_\_ (Stack volumetric flow rate; for Model 910 only)

E<sub>SO2</sub> \_\_\_\_\_ units \_\_\_\_\_ (Mass emission; for Model 910 only)

E<sub>NO</sub> \_\_\_\_\_ units \_\_\_\_\_ E<sub>NO2</sub> \_\_\_\_\_ units \_\_\_\_\_

E<sub>NOx</sub> \_\_\_\_\_ units \_\_\_\_\_

## F. Data Collection (optional)

Chart recorder, type: \_\_\_\_\_, # channels \_\_\_\_\_ location:  shelter  control room

Data Acquisition and Control System (see note) location:  shelter  control room

Plant DCS

**Note:** Each AMETEK supplied Data Acquisition and Control System is tailored to the user's specifications as Company or Government Agency requirements vary. An outline of your requirements must be attached to this Application Data Sheet.

## G. Utilities

1. Power to the Analyzer:  120V,60Hz  240V,60Hz  120/208V,60Hz  220/308V,50Hz  
 220V,50Hz  240V,50Hz  Other (specify) \_\_\_\_\_

Is UPS Required (500 W)?  Yes  No

If Yes, UPS supplied by:  AMETEK  Customer

- 2. Instrument Air Requirements: 210 - 830 kPa (gauge) @ 30 L/min (30 - 120 psig @ 1 CFM)
- 3. Shelter Purge Air (if necessary): 415 - 830 kPa (gauge) @ 340 L/min (60 - 120 psig @ 12 CFM)  
**NOTE: PURGE AIR MUST BE BREATHABLE QUALITY**

## H. Sample Lines

- Sample line lengths are measured from the sample probe connection and from the vent valve connection to the sample ports on shelter wall, respectively.
- For AMETEK shelters, sample lines extend 28 cm (11 inches) into the shelter to connect to the analyzer. For AMETEK free-standing enclosure, lines extend 21 cm (8¼ inches) into the enclosure.
- Line lengths are **NOT** field alterable.
- Refer to Item I when calculating the sample line lengths.

Shelter: i) Sample Line Length: \_\_\_\_\_  cm  inches + 28 cm (11 in) = \_\_\_\_\_  cm  in

FS Encl: i) Sample Line Length: \_\_\_\_\_  cm  inches + 21 cm (8¼ in) = \_\_\_\_\_  cm  in

**Note:** Please consult AMETEK if there are any questions regarding sample line specifications. We would be pleased to assist you.

## I. Tag Numbers

Are tag numbers required?  Yes  No

If Yes, Analyzer Tag: \_\_\_\_\_

Completed by: \_\_\_\_\_ Date: \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_