



D-805 GAS DRYER INQUIRY DATA SHEETS

Gentlemen:

Without obligation on my part, please submit a quotation in _____ copies for a Kemp Dryer to meet the following specifications:

A. ENTERING CONDITIONS:

1. Gas to be dried: _____
(list constituents of gas and % of each. Indicate whether by vol. or wt.)
(see separate sheet for other constituents)
2. Molecular weight of process gas
3. Specific Gravity of process gas
4. Specific Heat of process gas
5. Flow rate of process gas (if intermittent application refer to C) scfm
6. Inlet pressure of process gas (list maximum and minimum) psig
7. Inlet temperature of process gas (list maximum and minimum) °F
8. Is process gas saturated at inlet temperature? Yes ___ No ___
9. List amount of water in gas _____, % of sat. ___%, or inlet dew point temperature of gas ___ °F

B. DESIRED OUTLET CONDITIONS:

10. Desired outlet moisture content _____, or dew point temperature ___ °F
11. Dew point is measured at ___ operating pressure, or ___ atmospheric pressure
12. Dew point is ___ average (elevation permissible at tower reversal), or ___ maximum permissible
13. If contaminants are to be removed, explain under remarks

C. OPERATING CYCLES:

14. Drying is required: _____ continuously _____ intermittently
(if intermittently; ___ # of hours on, ___ # of hours off)

D. TYPE OF REGENERATION DESIRED:

15. ORIAD Internal heat reactivated
16. Pressure Swing heatless
17. External heat reactivated blower
18. External heat reactivated closed loop reactivation.....
19. External heat reactivated split flow closed loop reactivation
20. Other, specify.....

E METHOD OF OPERATION DESIRED:

21. Automatic control, or other specify
22. Reactivation heat source (electric or steam).....



F. AVAILABLE PLANT UTILITIES:

- 23. Electric current:
 - A. Power circuitvolts-ph-hz _____
 - B. Control circuitvolts-ph-hz _____
- 24. Steam:
 - A. Pressure.....psig _____
 - B. Temperature°F _____
- 25. Cooling water:
 - A. Pressure.....psig _____
 - B. Temperature°F _____
- 26. Instrument air pressurepsig _____
- 27. Reactivation gas:
 - A. Type..... _____
 - B. Flow rate scfm _____
 - C. Pressure.....psig _____
 - D. Temperature°F _____
 - E. Dew point of gas.....°F _____

G. EQUIPMENT DESIGN DATA

- 28. ASME code design.....psig _____
- 29. Electrical constructionNEMA _____
- 30. Motor designation..... _____
- 31. Budgeted equipment price _____

H. ACCESSORIES DESIRED

- 32. Prefilter ___ yes ___ no, with bypass mounted to dryer ___ yes ___ no.
- 33. Afterfilter ___ yes ___ no, with bypass mounted to dryer ___ yes ___ no.
- 34. Moisture Load Controls as part of dryer ___ yes ___ no.
- 31. Other specify _____

I. REMARKS (if necessary use additional sheet):

IMPORTANT

In the drying of gasses, the higher the temperature, the more moisture the gas will hold. This may result in a dryer much larger and more expensive than need be if the temperatures were held to the lowest practical level. For example: Saturated air at 100 °F contains almost twice the moisture as saturated air at 80 °F. Likewise, operating pressures play an important part in determining moisture content of compressed gasses. Saturated air at 105 psig contains approximately 20% less moisture than saturated air at 80 psig at the same temperature condition. Operating at the highest practical pressure will result in a smaller, more efficient and more economical dryer design.