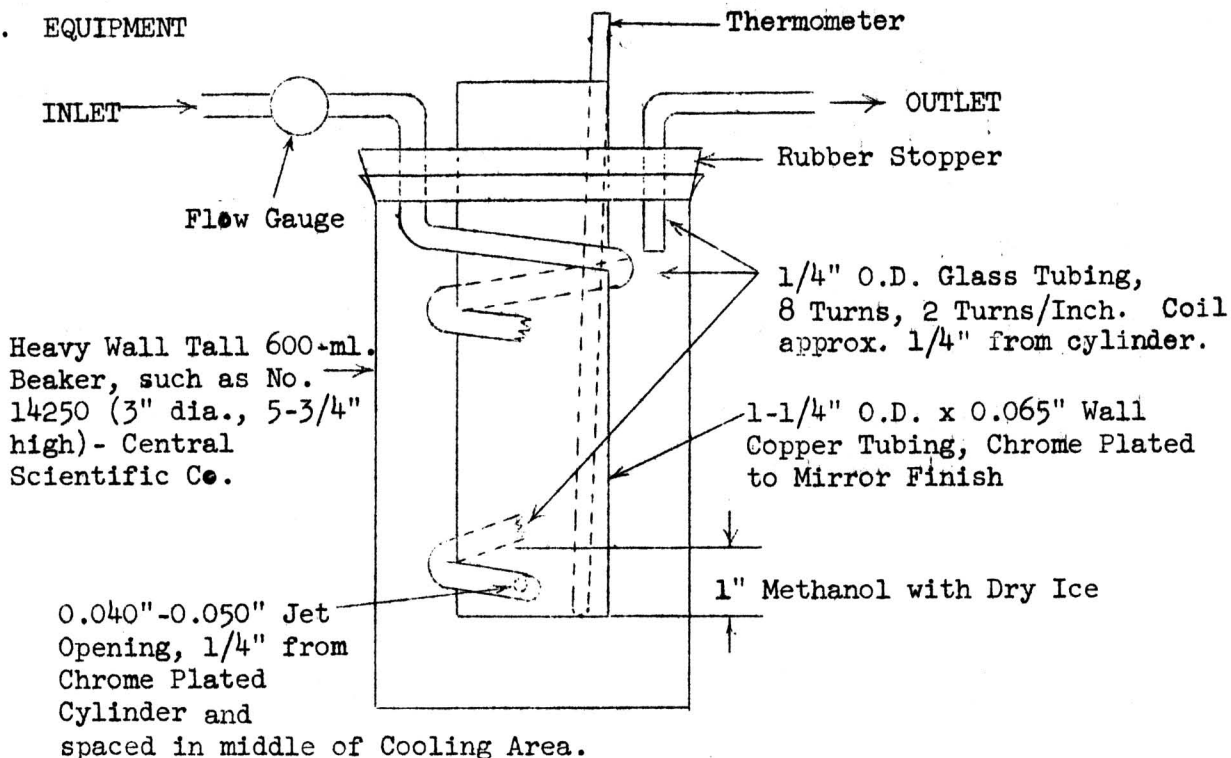


SUBJECT DETERMINING DEW POINT OF GAS
Process Specification

SUPERSEDED DATE

This specification describes a simple, accurate and flexible method for determining the amount of water vapor in hydrogen or any gas. The method is based on the fact that if the temperature of gas is varied while its absolute humidity remains unchanged, the dew point is that temperature at which the relative humidity is 100%.

1. EQUIPMENT



2. PROCEDURE

- Pass a portion of the gas to be tested through the Dew Point Tester and flush thoroughly to expel all air. If room is well ventilated, the gas may be vented to room atmosphere.
Note: 5 cfh. is the standard rate of flow for making dew point determinations.
- Add methanol to copper tube to about the level indicated on diagram and add small pieces of dry ice to methanol. at a rate so that temperature drops no faster than 15°C. per minute. Stir continuously with the low temperature thermometer. Do not use liquid air.
- Temperature at which the passing hydrogen becomes saturated with water vapor will be indicated by a fine condensation of moisture or by frost upon the brightly polished chromium plated tube immediately opposite the jet opening. This condensation or frost temperature is called the dew point and is expressed in degrees Centigrade.

ENGINEERING SECTION
STANDARDIZING

12-503-30-60

(PCL12780), MBL,JBW-121122/bw

★ CHANGE
★★ ADDITION
★★★ DELETION

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