



Fermilab
ES&H Section

INDUSTRIAL HYGIENE EQUIPMENT PROCEDURES
OMEGA MODEL RHSP SLING PSYCHROMETER

10/92

OBJECTIVE

To provide instructions for the use of the Omega Sling Psychrometer.

EQUIPMENT

- Sling Psychrometer
- Water
- IH Sampling Notes Form

PROCEDURE

1. Unscrew the end cap. Fill end cap with water and replace; tighten just enough to prevent leakage. Assure that the wick is thoroughly wetted.
2. Pull tube clear of body so body can swivel.
3. Holding the tube as a handle, whirl two or three revolutions per second (120 to 180 RPM).
4. Continue whirling until temperatures stabilize (usually 1.5 minutes).
5. Quickly read the wet and dry bulb thermometers. The wet bulb is the bulb covered by the wick.
6. Push the psychrometer body back into the tube.
7. Choose either the 50 to 100 degree F or 30 to 70 degree F wet bulb ranges on the slide rule type calculator scales on either side of the instrument.

8. Align the wet bulb and dry bulb temperatures. Read the relative humidity opposite the arrow (Y like mark) on the lower scale.
9. Record reading on IH Sampling Notes form.