

## COOLEY TYPE DS PYROMETER

### CARE AND MAINTENANCE

In order to secure the most satisfactory results from the use of pyrometers it is essential that certain procedure be established.

When the pyrometer is first installed be sure that the thermocouple is connected securely to the proper terminals at the back of the pyrometer. A periodic checkup on these connections should be made to insure that a good contact is maintained and that the terminals are neither corroded nor loose. After connecting thermocouple to pyrometer, heat the couple end with a match. If pyrometer needle does not indicate some temperature above room temperature, the leads are improperly connected and should be reversed.

The thermocouple should be checked periodically to insure proper functioning of the pyrometer. Thermocouples deteriorate from atmospheric attack and from various gasses developed in use of the furnace. A protecting tube is recommended where quantities of CO are developed regularly, or other gasses that normally combine readily with oxides.

When these pyrometers are shipped the adjustment is correct but it can be shifted from handling in shipment. It is recommended that the pyrometer should be checked by using another pyrometer and couple at approximately the temperatures at which the furnace is going to be used. If adjustment is required this can be effected by turning the adjusting screw in the face of the pyrometer located just below the glass window.

Owing to the small size of these pyrometers, their accuracy over the entire scale range is limited to within plus or minus 2%. However, they are set in calibration so that this error occurs mainly in the low temperature ranges, so if your pyrometer is indicating something above room temperature when the furnace is cold, it is because the setting is so made that approximately correct readings are obtained at higher points of the scale.

A periodic check of the pyrometer is advised in order to insure that it is functioning accurately.