

The invention relates to area of measurement of temperature with thermoelectric transformers (thermo-couples) and can be used for increase of accuracy and service life of thermo-couples that are in long-term operation in aggressive substance or operating at extreme conditions. Thermoelectric method is in placement of working end of thermo-couple to medium temperature of which is measured, with registration of value of thermo-electromotive force measured at free ends, heating working end of thermo-couple by passing current through thermo-couple with determination of temperature by formula.