

Annotation

In the given diploma project it is considered a structure principle light's pyrometer with a heating thread.

This device can be used in cases where unacceptable change in temperature field object that can occur through contact with an object thermometer measurement. Temperature measurement using pyrometers allows you to control the manufacturing process of melting iron, steel, and monitor the status of furnaces used in the relevant processes to predict emergencies. Temperature control using pyrometers in the production of glass, plastic and products from them allows you to maintain a preset temperature regime of the process and product quality control in the manufacturing process.

Luminance pyrometer advantage is low cost manufacture, compact device, wide measuring range and simplicity of working with them. The disadvantage is attributed a low accuracy and subjective measurement method based on the spectral sensitivity of the eye of the observer.