

Annotation

The purpose of this graduation project is device developing for surface cleanliness testing, that is used for degree analyzing of thin layer organic pollution by fluorescence method.

The work of this device is based on properties of organic matter fluorescing that is to emit cold light, under the action of ultraviolet rays. Organic contamination is the cause of some defects in welded and adhesive joints and decorative and protective coatings. There are large numbers of potential sources of organic pollution, for example, it may be residues of oil, contaminated air from the ventilation system or even fatty secretion of human skin.

In this graduation project the modeling and calculation of the device optical system were carried out, functional and electrical scheme and assembly drawing of the device were developed.