

Quantitative assessment of protective properties of the apparatus by digital technology method and its verification by radiometric method

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An innovative model of a portable class hose gamma flaw detector “RID 50W” is presented, equipped with an environmentally friendly tungsten protection unit for use with emitters based on ⁷⁵Se and ¹⁹²Ir. The issues of optimization, synthesis, computer engineering of critical components and quantitative assessment of technical parameters and characteristics of equipment are considered.

Keywords: hose gamma-defectoscope, biological protection unit, pseudo-alloy WNIFE-95, laser sighting device, tungsten corrector.

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