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## Modern radiographic complexes based on ironless pulsed betatrons. Conception of radiographic complex for small-angle tomography.

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The conception of creating a mobile radiographic complex based on ironless pulsed betatrons is proposed for radiography of dynamic objects having large optical thicknesses. Realization of this conception allows: a) optimizing of a geometry of the hydrodynamic experiment at the expense of the radiation source and recorder position relatively to the test object, located in the explosion-proof chamber(EPC). This lets increasing twice intensity of the x-ray radiation in the recorder plane compared with available Russian complexes; b) creating an efficient environment protection system at the expense of localization of dangerous explosion products and caused shock wave; c) significantly decreasing of the cost of the complex due to lack of expensive heavy casemates and their infrastructure. Instead of them it is possible to use cheap rapidly erected constructions. The mobile radiographic complex is described. Its achieved characteristics during the testing exploration were adduced. Thickness of the lead test at 1,5m from the tantalum target at the limiting energy of the betatron electron beam Elim<sup>~13</sup> MeV( it is determined by the value of a capacitive storage of the pulsed powering system of the electromagnet) was <sup>~120</sup> mm. Conception of a multibeam complex creation based on ironless pulsed betatron for small-angle tomography was also considered.

Author: Mr SHAMRO, Oleg

**Co-authors:** Mr CHININ, Aylan; Mr KOZLOV, Sergey; Mr KUROPATKIN, Yuri; Mr NIZHEGORODTSEV, Vladimir; Mr ROMANOV, Ivan; Mr SAVCHENKO, Kirill; Mr SELEMIR, Victor; Mr URLIN, Evgeny; Mr ZENKOV, Dmitry

Presenter: Mr SHAMRO, Oleg

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