

ILU RF ELECTRON ACCELERATORS FOR E-BEAM AND X-RAY APPLICATIONS.

ILU type industrial accelerators are RF pulse accelerators with energy range from 0.8 to 10 MeV. First of these accelerators were designed in the 1970's. But market development requires continuous modernization of accelerators. Great prospects for the use of accelerators in industry are provided by a new market - food irradiation. The report describes accelerator upgrades associated with food irradiation and sterilization. For this, accelerators must operate with energies from 5 MeV to 10 MeV in the electronic mode and in the mode of bremsstrahlung gamma radiation. Two branches of ILU accelerators are described. One is based on an ILU-10 single-cavity accelerator and a vertical beam. The second is based on the ILU-14 multi-cavity accelerator, which has a horizontal beam, see Fig. 1. Both families are modular and upgradeable.

Section

4th International Conference “Nuclear and Radiation Technologies in Medicine, Industry and Agriculture” (Section 4)

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Track Classification: 4th International Conference “Nuclear and Radiation Technologies in Medicine, Industry and Agriculture”(Section 4): Sub-Section 4-2 “Radiation Technologies”