

Two-Cell RF Gun for a High Brightness Linac,
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Science Center, Kharkov Institute of Physics &
Technology (KFTI) - We present the design and results
of experimental study of the multipurpose two-cell RF-
gun. The RF gun can be used with both thermionic and
photoemission cathodes. The main peculiarity of the
gun is possibility to change by special tools the
distribution of RF electric field along axis of the
cavities. This feature gives possibility to choose the
optimal conditions for obtaining requisite beam
characteristics in both modes of operation. The RF gun
has been installed and tested at Laser Injector Complex
facility. In particular, pulse current about 2 A was
obtained at the gun exit under using the thermionic
cathode.