

Procedure of calculation of the dynamic focusing systems for technological electron beam and ion beam devices

L. B. Rozenfeld

Research Institute for Electron & Ion Optics, Moscow, Russia

The problems of construction of the dynamic focusing systems for electron beam (or ion beam) technological devices, providing constant value of beam diameter on all scanning field on the object, are discussed. Analytical expressions for calculation such systems are proposed. It is shown, that for providing constant value of magnification at big angles of beam deflection it is necessary to use (as a minimum) three dynamic lenses.