The Flat Corona Triode and Intermediate Screens in Electrostatic Generators, O.B. DZAGUROV, V.P. PETUKHOV, INP MSU - A design and principle of the flat corona triode function is described. That construction lets pass the current of corona triode through the intermediate screens of the electrostatic generator. An influence of intermediate screens on the parameters of electrostatic generators is discussed. Calculations of the disposition and numbers of intermediate screens ensuring the maximum of the voltage of electrostatic generator are presented. By experiment it was demonstrated that using two intermediate screens increases the voltage of the generator to 60%.