Disclosed is a method for controlling a radial dimension at diamond or abrasive finishing bores, according to which a carrier of diamond or abrasive grains is moved in the radial direction for changing the size under action of the regulator of radial size. Adjustment of radial size is carried out by hydrostatic pressing fluid by a movable plunger. A tool for diamond or abrasive finishing bores provides implementation of the above method, it comprises a carrier of diamond or abrasive grains, and a regulator of radial size that interacts with a carrier. The regulator of radial size is made in the form of a hollow thin-walled cylindrical body with a concave bottom. A side of a cylindrical body opposite to the bottom is tightly attached to the hydraulic cylinder. A rod of hydraulic cylinder enters into the inner cavity of hollow thin-walled cylindrical body filled with fluid. The invention provides for elimination of losses for friction forces impeding the process of stable setting size.