A tool for diamond or abrasive machining holes is made in the form of a hollow cylinder. On the outer surface of hollow cylinder diamond or abrasive grains in the form of bars are located and arranged in slots, or in the form of a continuous layer of individual grains. The hollow cylinder is intersected by a through closed screw groove that forms within said cylinder a spatial screw body. The invention provides for elimination of losses for friction forces impeding the process of stable setting radial dimension.