

STAND FOR THE ROTATIVE BORING OF SOFT ROCKS

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Abstract: This paper presents the way of making up a stand for the rotative boring of soft rocks (coal, plaster stone, rock salt, very soft limestones, compact marble) which have the boring and cutting resistance up to f = 3, according to prof. M.M. Protodiakonov. In order to achieve a wider range of revolutions and axial advances there was used an ordinary lathe which has a device mounted on the main body where the evidence used for boring is caught, and in the knife frog, by means of a translator the rod with borer head is fixed. The catch of the sample is made up by a biaxial pretensioning that is similar to working circumstances. By measuring the moment and the advance force, the most favourable boring running can be established (revolution, advance), as well as the most favourable geometrical shape of the borer head, according to the mechanical characteristics of the rock.

Key words: rotative boring, soft rocks, geometrical shapes, dynamometer, stand.