

## عنوان مقاله:

New Approach in Tunneling Construction Using the Forepooling Technique

## محل انتشار:

دومین کنفرانس منطقه ای و یازدهمین کنفرانس تونل ایران (سال: 1394)

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## خلاصه مقاله:

Austrian Tunneling is mainly applicable for big section tunnels. The tunnel is excavated step by step in this technique. Furthermore, forepoling, jet grouting and freezing are the techniques applied to construct falling tunnels; however, Austrian tunneling should not be used alone in medium section tunnels such as water conveyance tunnel and falling tunnels. As a result, the authors have introduced a new technique called Right-Left technique. In this technique, first forepoling, also known as tube umbrella, was used to strengthen tunnel. Then, having divided tunnel into two left and right sections, the right section was excavated exactly the size of half a steel frame and shotcrete technique was immediately used. The same technique was applied to the left section. Then, the face was advanced by drum cutter up to the area excavated by steel frame. The operation cycle was completed in this way. Relative stability was obtained by using this technique. In this paper, technical reasons for choosing this technique was presented. Furthermore, using Flac 3D, its convergence was compared with that of the Austrian

## کلمات کلیدی:

NATM Method; Forepooling; Right-Left; Flac3D

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/599122>

