RQD CLASSIFICATION OF ROCK MASSES

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Abstract: The RQD index is used today as one of the basic elements of the two major contemporary classifications of rock masses: the RMR classification and the Q classification. RQD was defined by Deere in 1963 (Deere, 1963) and was intended to be used as a simple classification system for the stability of rock masses. Although the RQD classification is a simple and relatively inexpensive method of determining the quality of rock masses, however, it is not sufficient for an adequate description of the rock mass. The main disadvantages of this classification system are susceptibility to direction of measurement (orientation of cracks), thickness of the crack, crack infill, as well as to variation of spacing of cracks if the spacing is greater than 1.0 m. This work presents the basics of the RQD classification, upon which the main rock mass classifications used in the construction of tunnels are established.

Keywords: RQD, rock mass, classification, discontinuity, rock quality