

BLAST VIBRATION INTENSITY IN THE CHANGING HYDROGEOLOGICAL CONDITIONS

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The attenuation of blast vibration intensity in jointed sedimentary rocks depends not only on geological anisotropy of these rocks but also on hydrogeological conditions there. In mine blasting areas groundwater level in vibration medium varies largely. The vibration measurements were performed in different hydrogeological and geological conditions. Both factors were analysed together and separately, the impact of gravity water content on the vibration attenuation intensity was established and an equation to express this function was worked out.

The water content of rocks varies depending on the season and on the location of blasting site as regards the general water depression of mine. It is necessary to consider it while designing cautious blasting.